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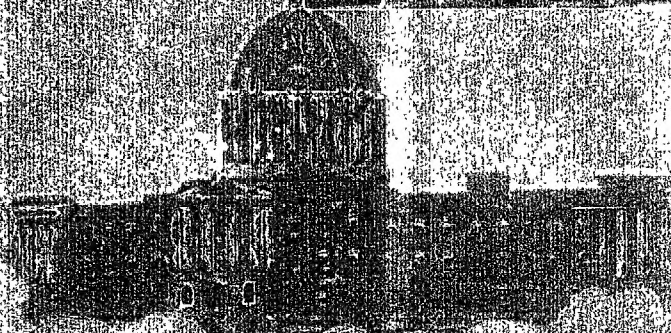
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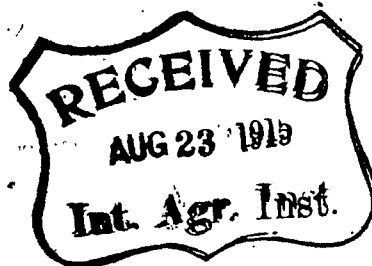
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PROVINCE  
OF  
SASKATCHEWAN

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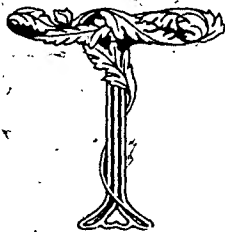
DEPARTMENT of AGRICULTURE  
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REGINA CANADA



Government of the Province of Saskatchewan

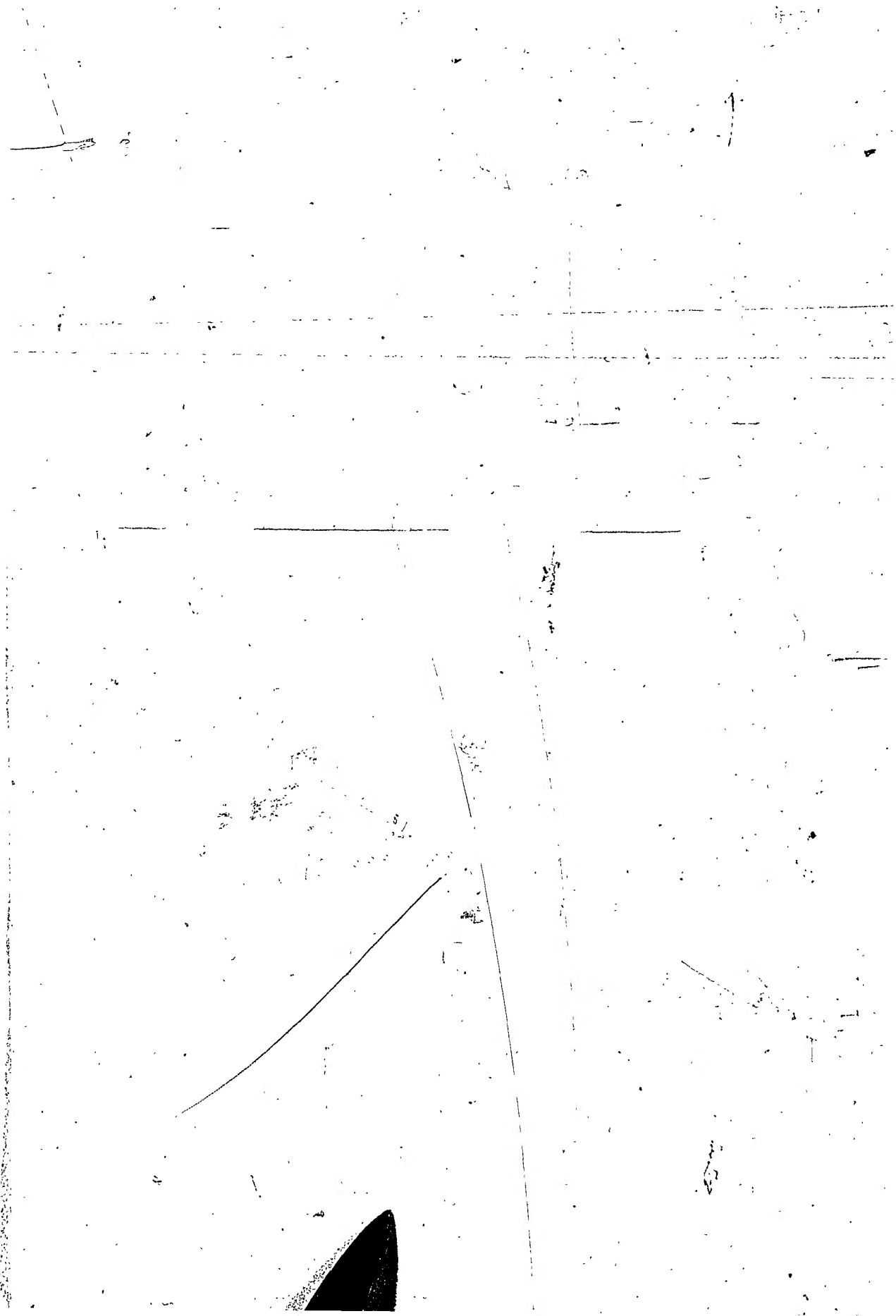
DEPARTMENT OF AGRICULTURE  
REGINA

# *Saskatchewan*



Published by Authority of

HON. W. R. MOTHERWELL, Minister of Agriculture



## PREFACE

Since the organisation of the province in 1905, Saskatchewan has enjoyed unexampled prosperity, and has far outstripped its sister provinces in ratio of increase of settlement and general development. There has been in consequence an insistent demand for information concerning the country's resources and the opportunities which it offers to every phase of collective or individual enterprise. To those in search of such information it is hoped that this handbook will be found valuable.

It has not been considered necessary to more than refer in the briefest possible manner to many subjects, in view of the fact that they have already been fully dealt with in various departmental reports and bulletins. Moreover a monthly journal containing notes on current provincial affairs is being issued by this department, and all those interested can have this publication mailed to their address free of charge.

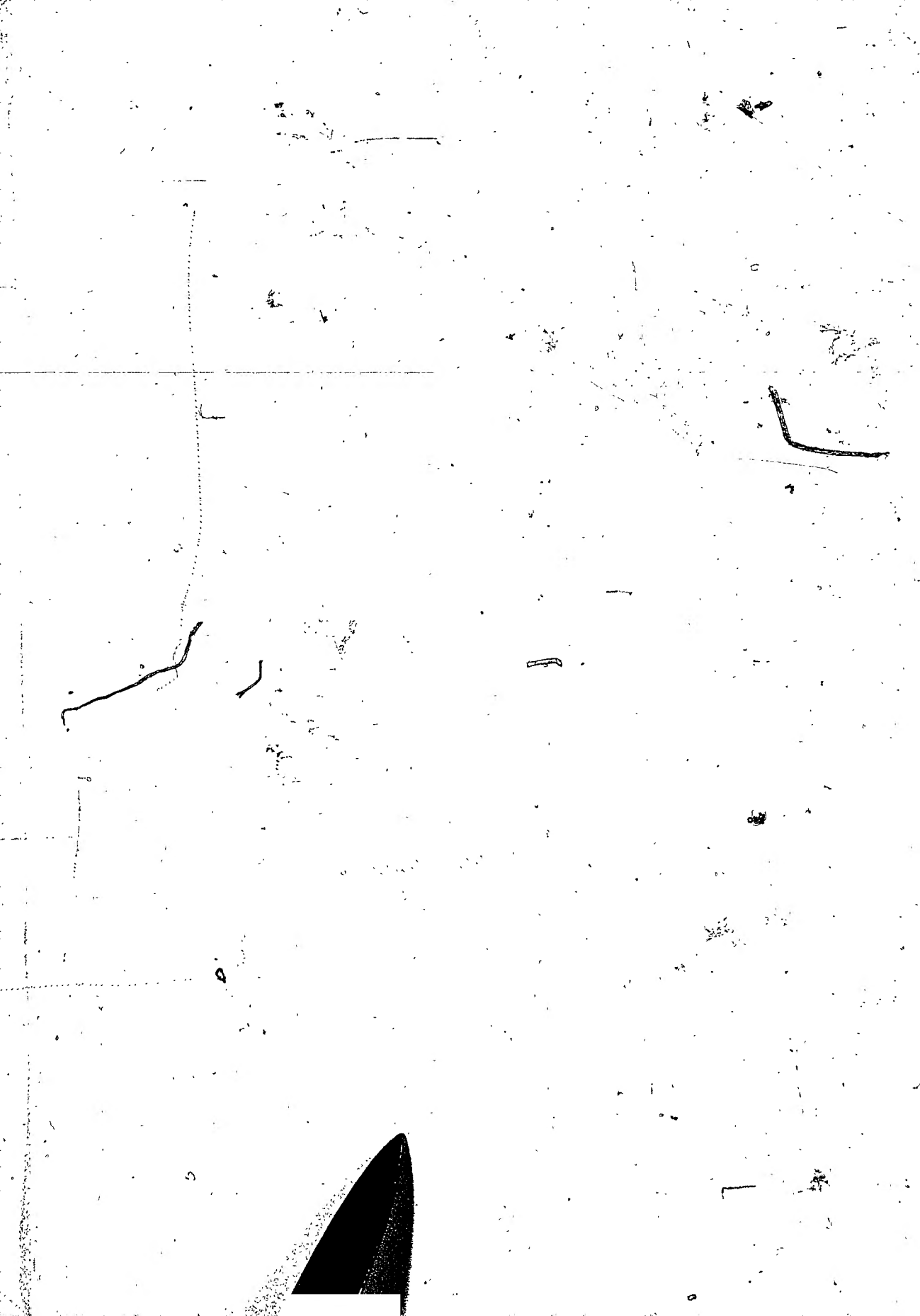
An effort has been made to write a more or less connected story of Saskatchewan's progress and development, and in this respect the present publication differs from any previously issued since the formation of the Bureau of Information and Statistics. In order to make it as attractive as possible to the general public, long tables of statistics have been avoided as far as possible, while the essential features of development have been presented in concise form.

Acknowledgment must be made of the ready assistance of departmental heads and others from whom information was sought. For much of the data contained in the Historical Sketch we are indebted to Mr. Wm. Trant, P.M., and to Mr. T. E. Perrett, M.A., Regina.

Department of Agriculture,  
Saskatchewan Government.

T. CROMIE,  
Secretary, Statistics Branch.

Regina, Sask., August, 1912.





## THE PROGRESS OF THE PROVINCE OF SASKATCHEWAN

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IN order to properly grasp the wonderful strides that this province has made in its march towards prosperity it is necessary to understand the condition of affairs, say twenty years ago, when the settlers were faced with tremendous difficulties, and afterwards to state the result of these twenty years of steady improvement. In thus glancing back through the years, the most casual observer of today must stand amazed at what we have achieved in that short space of time, and must feel astonished at the resources of the country which have enabled its inhabitants to attain their present height of prosperity.

Twenty years ago the cry was common, that "there is no money in the country." The only product which was saleable for cash was wheat, and payment for all other kinds of farm produce was by barter, the only buyers being the local butchers or storekeepers, who put a huge profit on their goods when exchanging them for the farmer's butter, eggs or beef. Freight rates were maintained as high as the people would stand, and the amount of freight offered to the Canadian Pacific railway was but little.

There were a number of poor seasons consecutively about this time. Fifty cents a bushel was a high price for the best wheat, and it took half of this fifty cents to market it. One could not sell anything else for cash, and bran was cheaper for the miller to use as fuel than coal. Still the settlers were not discouraged. When too far from timber they built their houses and stables of sods, with the useful poplar framework and canvas lining. They took things as they came in the good old timer's way. Aided by the extraordinarily healthful climate they brought up and educated their children as well as they could, for schools were few and far between. Up to 1897 there was very little improvement in the condition of the people. There was no grading of wheat under government supervision, and the farmer had to take whatever the buyer offered or go without the money. Eggs were sold at the rate of five dozen for 25 cents' worth of sugar or tea. Beef was cheap, for it was plentiful, and there was but very little shipped east. In many cases the wives and families

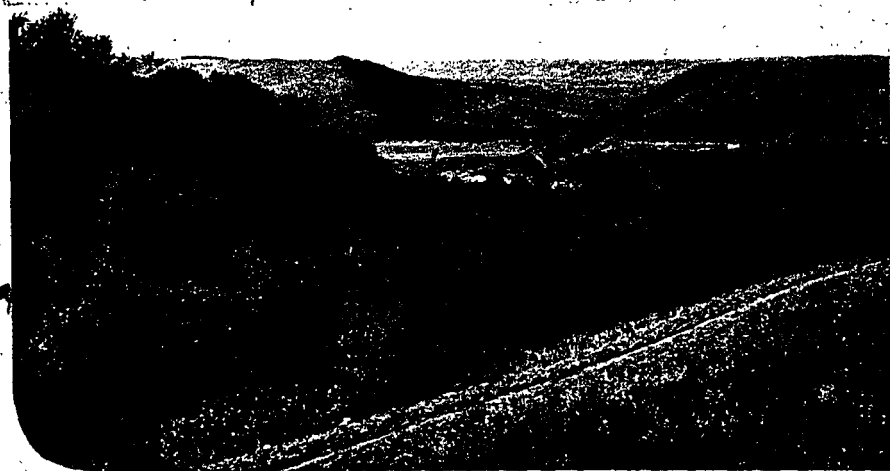
of the farmers, who were located perhaps sixty or more miles from the railroad, did not come into a town from one year's end to the other. Young men and girls have been seen inside a store for the first time in their lives at the age of eighteen. Bright and intelligent, these young people's knowledge of the world was gained entirely from books and from the lips of their parents. The reader can scarcely imagine the loneliness of the life to which the wives of the early settlers were condemned, when they cheerfully accompanied their husbands in their pursuit of health, wealth and happiness on their arrival in Saskatchewan.

Now to turn to the other side of the picture. The people of Saskatchewan are in an enviable situation at the present time. The province produces more foodstuffs of various kinds, per capita, than any other half million of people we can name. This is a startling statement, but it is based on facts. Moreover, the fertile area from which this result is produced is not yet 10 per cent. of arable land within the boundaries of the province. In grain alone Saskatchewan produced, between 1898 and 1912, 607,000,000 bushels of wheat. In 1912 the wheat was worth \$71,802,359 to the farmer, and the total farm products amounted to \$128,343,160.90.

There are three railroads competing for business, with a mileage of about 4,700 in the province, and more construction projected for the coming year of about 1,000 miles. This is a long step in advance from the time when the Canadian Pacific railway wound its solitary way across the plains.

There is no country where the farmers are better organised for the protection of their own interests than here. They have the Grain Growers' Association, of which the present Minister of Agriculture was the first president and chief organiser, and the Saskatchewan Co-operative Elevator Company. Both of these look after the interests of the grain raiser in every way, and the latter company, aided by the Provincial Government, hope to relieve the farmer from his former almost intolerable position, when he was at the mercy of the line elevator owners, both as to the grading and price of his grain, and also suffering from his inability to get cars from the railways to load his grain in for transportation, at the sidings and loading platforms.

Then there are horse, cattle, sheep, swine and poultry breeders' associations and numerous agricultural societies, all of which are liberally aided by the Provincial Government in their work of improv-



Our Scenery is far from monotonous.

ing the various breeds of animals, and in inculcating the most scientific and modern methods of farming in the minds of both old and young agriculturists. The amounts of the cash grants for these purposes have increased from \$9,000 in the year 1904 to \$54,000 in 1911. Prior to the establishment of the Agricultural College at Saskatoon, many young men were sent to the colleges at Guelph and Winnipeg, earning scholarships paid by the government. Farmers' daughters, too, were sent by the government to be instructed in domestic science.

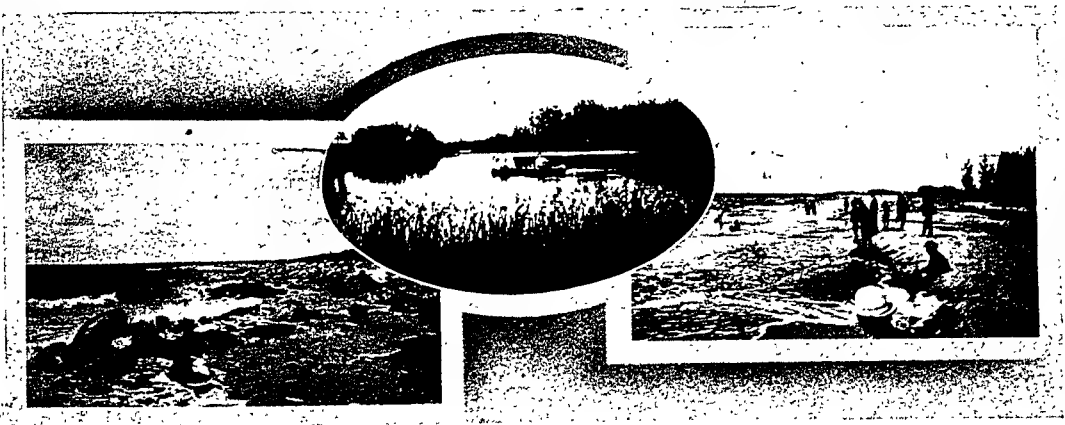
A great proportion of the country has now been formed into rural municipalities, who spend the money raised by taxation themselves, and with the aid of government grants build roads and bridges. Schools are being increased in number with extraordinary rapidity, and now number nearly 3,000, with 15 high schools. Rural telephone companies now number 337, with 7,547 miles of system representing a capitalisation of approximately \$931,060. In addition the government-owned long distance lines traverse the country in many directions, and construction work will be carried on very rapidly in coming years.

With an increase in the volume of trade covering the period from 1904 to 1910 of 133 per cent., with modern facilities and the best of machinery at his disposal, with 90 per cent. of our land still unoccupied, with the best blooded sires for his live stock and all his interests well protected by the government, the Saskatchewan farmer has reached a point where his position must be the envy of agriculturists the world over.

It has been said that the wealth of the farmer makes the wealth of the community, and this must be especially true as applied to our province, for there has been established such a foundation of agricultural resources as must tend to enrich any and all of our population. Merely awaiting the time when the increase of population through immigration shall warrant them, many capitalists will invest in schemes looking to the development of our other resources. We have valuable coal for the operation of any kind of industry requiring steam or electrical power. Water power also is available in many places, not only in the north, where the rapid running Saskatchewan river and other streams are found, but also in the south-east in the Moose Mountain country. The finest kind of clays for brick or tile making are quite abundant. Minerals of great value are not lacking, there being large iron ore deposits in many places as

well as aluminium. The more northerly portion of the country has not yet been at all well prospected, and it is expected that much mineral wealth will be revealed.

All these resources are becoming more and better known, and foreign capital is coming into the country faster than ever before, showing the confidence which financiers are bound to feel in such a country as ours is proving itself to be. We attract the finest class of settler, and our best advertisements are the letters he sends to his friends and relatives, advising them of his contentment and prosperity.



Summer Playgrounds

## TOPOGRAPHY

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THE general impression that seems to prevail in the minds of those who have passed through the country on one of the transcontinental lines is that Saskatchewan is a flat, treeless expanse covered with grass. As a matter of fact, there is a large variety of country; open plain, flat and undulating; park land, and valleys beautifully wooded, in the heart of which nestle lovely lakes drained by winding creeks. Even in south-eastern Saskatchewan, which, for the most part is open plain, there are beautiful valleys, the most picturesque of which is the Qu'Appelle. Saskatchewan is really a country of open spaces which may consist of either flat or undulating prairie intersected with stretches of brush and timber. It is impossible to go more than forty or fifty miles in any direction without striking timber of some kind, while a large portion of the northern settled section around Prince Albert and Battleford is park country; that is to say, open spaces dotted by bluffs or copses and giving to the country somewhat the appearance of an English park.

The province is a network of streams, lakes and rivers. Of mountains there are none, properly speaking. South-eastward to the international boundary there is a range of hills that rise very gradually from the surrounding plains and reach a considerable height. The range is known as Moose Mountain and is about thirty miles from east to west and half that distance from north to south. More westerly, and also near the international boundary, the prairie is broken in two places by ranges of hills. One of these is Wood Mountain. The other range of high lands is called the Cypress Hills, stretching eighty miles east to west, twenty miles north to south, and reaching a height of 4,000 feet. In other parts of the plains there are similar breaks in the prairie, though not of such considerable dimensions, such as the Dirt Hills, the Touchwood Hills and some others. Streams and creeks descend from these high lands to the plains around them. Timber is found in the ravines and coulees that intersect the hills.

Southern Saskatchewan is a continuation of the great grain growing areas of Manitoba and includes the great wheat plains of Regina and Moose Jaw. Western Saskatchewan from Swift Current to the



Some Views of Saskatchewan Lakes.

Alberta boundary and south to the international boundary is a rich mixed farming and ranching country. Central Saskatchewan, through which flows the Saskatchewan river, is pre-eminently suited for mixed farming and the production of wheat. This district lies in the same latitude as the British Isles. The elevation above the sea is 1,300 to 1,500 feet. It is traversed by both the north and south branches of the Saskatchewan river; also by the Battle river, the scene of many fierce Indian conflicts. The district is also intersected by many tributary rivers and creeks. The principal lakes are Jackfish, Manitou, Birch, Redberry, Quill and Long Lakes.

The country north of the great Saskatchewan river in the Prince Albert district consists of open park-like glades where the wild pea-

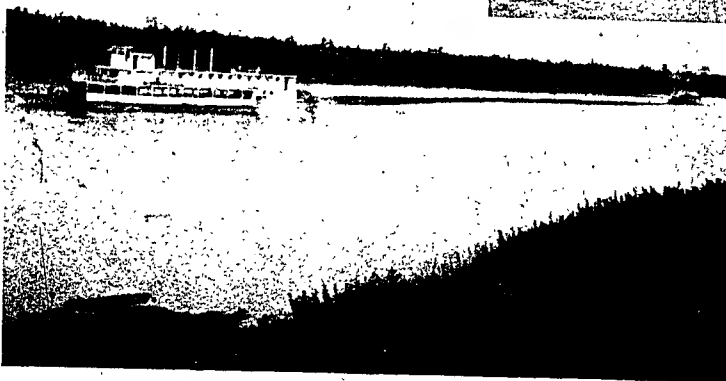
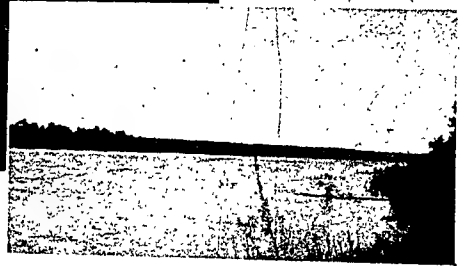
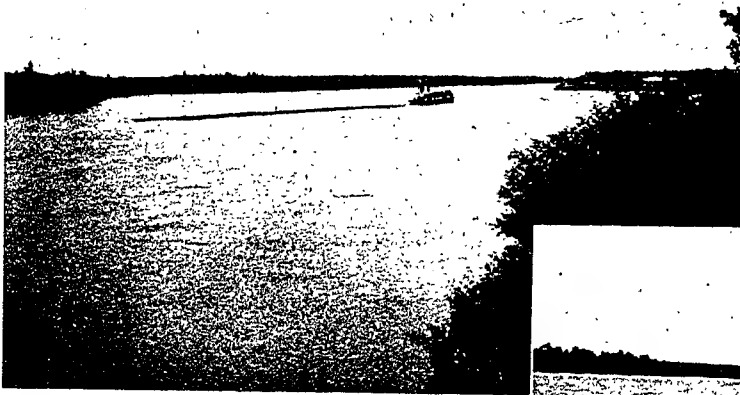
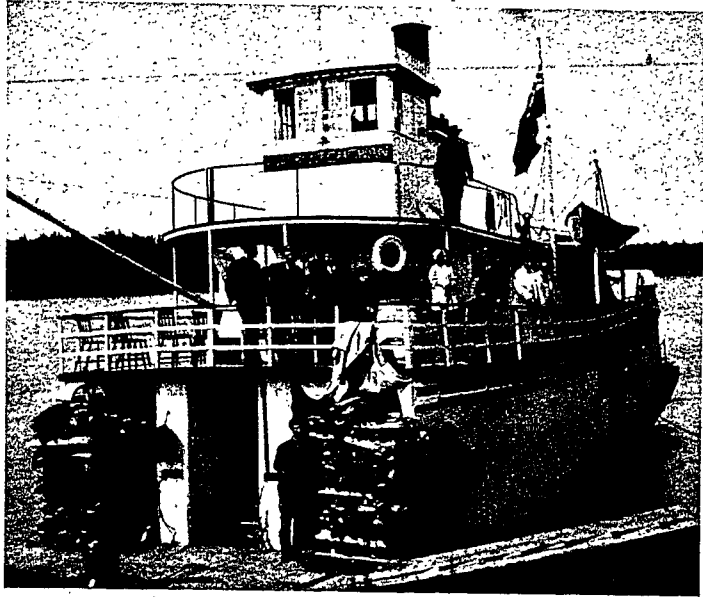


Lake Lenore



vine and vetch grow breast high, alternating with clumps of tall white poplar. There are patches of willow and low spots with nice hay meadows and little gem-like lakes. One might be at home in rural England but for the different feel in the air which is the very opposite, in its tonic qualities, from the less bracing characteristics of the more humid clime. This northern section is no lazy man's country where the settler can plough a mile without striking an obstacle as on the prairies; but the fertility is there and the soil will repay the extra effort. Homesteads are to be got in this region within a few miles of a new line of railway, of which probably one hundred acres would be clear land or have at the most an occasional patch of scrub. The presence of this growth is a certain indication of moisture. Where the poplar and willow flourish drought is almost unknown, while they are a further evidence of quality of soil, as well as a guarantee of plentiful fuel and shelter for stock.

The lands of Saskatchewan are of three classes: first, as having special adaptation to the production of grain; second, as having such adaptation to mixed farming of which live stock will form an important feature; and third, as being mainly adapted to the production of live stock only. Of the third class of lands the area is not very large, of the second it is much larger and of the first it is by far the largest. Of course, the land that has high adaptation to the growing of grain may be made to have equally high adaptation to the growing of live stock, according to the way that it is farmed.



## SOILS

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**S**ASKATCHEWAN'S soils are amongst the richest in the world. Nature in her younger days was very kind to western Canada, inasmuch as the lakes of the glacial areas which covered the plains deposited the silts and sediments which now form the heavy, rich loam on the clay subsoils, which combination makes it the most fertile land in the world. This soil is exceedingly rich in nitrogen, potash, lime and phosphoric acid, the chemical properties most desirable in every way.

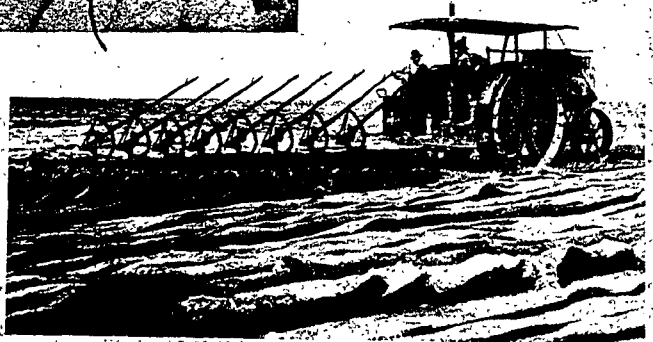
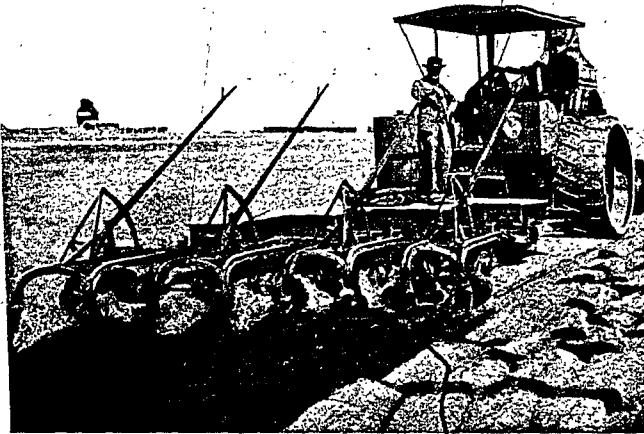
The following extracts from a recent report of the chemist of the Dominion Experimental Farms (Frank T. Shutt, M.A., F.I.C.) form unquestioned proof of the fertility of Saskatchewan soils:

"If we were asked to state what, in our opinion, constitutes the essential or distinguishing characteristic of the western prairie soils, we should unhesitatingly answer that it is the large proportion of vegetable matter and its concomitant nitrogen they possess. It is to this fact, unquestionably, that they primarily owe their remarkable fertility and lasting quality. For the most part, they certainly contain abundant stores of the mineral elements of plant food, but in this respect they do not differ from many soils of less productiveness in other parts of the Dominion. It is the larger percentage of nitrogen-holding, humus-forming material and its intimate incorporation with the sand and clay that give to these soils their superiority chemically, physically and biologically.

"We have found that these prairie soils, during growing season, may retain amounts of water far in excess of those present in soils less rich in organic matter though favoured with a heavier precipitation—as in Eastern Canada. Further, the high absorptive capacity of these soils under suitable cultural methods allows moisture to be held over from one season to another, and thus it is possible, in districts of scanty precipitation, by means of a fallow, to secure two good crops in three years, when only very meagre yields would be obtained if the land were seeded every year.

"As regards these soils, nitrogen may be regarded as the chief index of their fertility, the most reliable measure of their crop producing power—and this is true for both clay and sandy loams.

In this connection, it may be remarked that the extraordinary growth that characterises vegetation on the prairies as soon as the season opens is unquestionably due, for the most part, to the fact that very rapid nitrification takes place in the spring and early summer months, consequent upon the large water content of the soil and the high temperatures which then prevail.



Modern Husbandry.

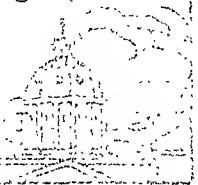
"Fertility is due to the tremendous accumulation of nitrogenous organic matter with its associated mineral constituents—the remains of countless generations of plant life—for, since the glacial period these prairies have been continuously clothed with grasses and leguminous herbage. In these soils we have a remarkable example of the now well known fact that land in sod increases in its nitrogen

content, and also, no doubt, in its store of available plant food generally. We are certainly justified in considering that the great depth and high fertility of the prairie soils come to us as an accumulated legacy—one undoubtedly of the most valuable character, and one which, looking to the future prosperity of the west, we shall do well to conserve by rational methods of farming.

"If we push the inquiry farther and ask if there are any special reasons why these soils are in this respect so much more fertile than, say, those of Eastern Canada, we find the answer in the peculiarly favourable climatic conditions that have existed and still exist in the north-western provinces for soil enrichment. High diurnal temperatures, long days, and a sufficient rainfall during the growing seasons are conducive to a most luxuriant growth. Rapid nitrification and conversion of inert mineral matter into available plant food take place practically throughout the summer, and withal there is no excess of rain to leach out and carry off the soluble constituents. These conditions, further, tend to the production of more or less soluble mineral matter, alkaline in character, largely carbonate of lime, which renders the soil favourable for bacterial activity and vegetable life in general, and probably is of assistance in the formation of humus. And lastly, we have the winter season with its intense cold practically locking up the stores of plant food from the autumn until the season again opens. Waste from leaching, such as occurs in countries in which the winter is mild and open, is thus prevented. In passing, it may be mentioned that this important fact has been, for the most part, overlooked by those who have written upon the various problems of western agriculture.

"In reviewing the soils of Saskatchewan examined by us during the past twenty years, a difficulty has been encountered in selecting only those which were truly representative of fairly large areas, for, as will be remembered, the second prairie steppe, comprising the larger part of this province, is not characterised by the uniformity noticed in the Red river valley. This fact precludes the possibility of presenting here examples of all types to be found, but it is worthy of remark that the larger number of the soils examined, and more particularly those in the noted wheat growing districts, have been found to be abundantly supplied with humus-forming material and nitrogen.

"No. 1. A rich, black loam from Moosomin, a point on the main line of the Canadian Pacific railway, 220 miles west of Winnipeg.



The elevation of this locality is in the neighbourhood of 1,900 feet, and this soil may be regarded as fairly representative of the south-eastern part of the second prairie level. As in the types we have considered from the first steppe, this true prairie soil possesses abundant stores of plant food, and is, judged by accepted standards, one of high fertility. It has not, however, looked at simply from the chemical point of view, a rank equal to that from the valley of the Red river.

"No. 2. From the district of Tisdale, on the Canadian Northern railway, about 160 miles due north of Indian Head. The district is partly wooded with scrub, poplar, etc., and, therefore, unlike the true prairie, requires clearance. It is a grayish-black loam of a decidedly clayey nature. The nitrogen on the water-free soil is almost half of one per cent., with notable amounts of potash and lime, and an average phosphoric acid content.

"Nos. 3 and 4 are from Saltcoats and Yorkton, points on the north-western branch of the Canadian Pacific railway, 250 and 270 miles respectively, west of Winnipeg, and approximately 75 miles north-east of Indian Head. Their similarity and comparative contiguity render unnecessary the separate consideration of these two soils. They are black, sandy loams of the true prairie type, rich in vegetable matter and nitrogen, with excellent percentages of phosphoric acid and potash.

"Nos. 5 and 6 are black loams of a markedly sandy character, taken from areas that had been under grain (without manure) for



Wheat Growing

a period of about fifteen years. Wolseley, the place of the collection is about 20 miles east of Indian Head on the Canadian Pacific railway, a district which has produced large crops of very fine wheat. The data are of some interest since these soils have borne probably ten crops of grain, with a bare fallow every third summer. The evidence is that these soils are still of an exceedingly rich character, plentifully supplied with semi-decomposed vegetable matter and high in nitrogen; indeed, as regards these constituents, the data are not such as would differentiate them from virgin prairie soils. In "total" phosphoric acid they are decidedly above the average, but the amounts of this constituent immediately available are very small. This may be due to the taking up of the available phosphoric acid by the grain crop being more rapid than the conversion of the insoluble soil phosphates into assimilable forms.



"It's a fine Country, but you can't see it for Grain." A Busy Threshing Scene.

"Nos. 7 to 10 inclusive are from the Dominion Experimental Farm, Indian Head, and constitute a very instructive series, since they allow a comparison between the virgin prairie with the same soil after 22 years of cultivation without manure. The soil would be designated a heavy clay loam. A complete record of the cropping and fallowing since the prairie was broken in 1882 shows that the "cultivated" soil had borne six crops of wheat, four of barley and three of oats, with a fallow between each crop since 1887, nine fallows in all. The virgin soil was taken from an adjacent area, the point of collection being about 150 feet distant from where the cultivated

soil had been taken. The samples were of a composite character, and every precaution was taken to have them thoroughly representative. There is every reason to suppose that the soil over the whole area examined was originally of an extremely uniform nature; in other words that, at the outset, the nitrogen content was practically the same for the soils now designated as virgin and cultivated respectively. The tabulated data shows the percentages of organic matter and plant food in the first four and the first eight inches of these soils, and makes very clear that enormous losses of organic matter and nitrogen have followed upon the present method of continuously cropping with grain. The particulars respecting the nitrogen are given in the following arrangement, which allows a ready comparison of the two soils in this important matter."



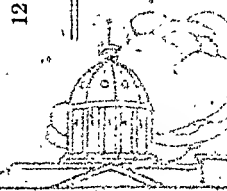
Little Manitou—Lake at Watrous



# SASKATCHEWAN SOILS

Results calculated to water-free basis.

No.	LOCALITY	CHARACTER of SOIL.	Organic and Volatile Matter (loss on ignition)	Nitro- gen	Phos- phoric Acid ( $P_2O_5$ )	Pot- ash ( $K_2O$ )	Lime (CaO)	Available Constituents		
								Phos- phoric Acid ( $P_2O_5$ )	Pot- ash ( $K_2O$ )	Lime (CaO)
			%	%	%	%	%	%	%	%
1	Moosomin.	Black Loam.	11.79	.479	.116	.306	.95	.024	.041	.568
2	Tisdale.	Grayish-black loam	14.23	.480	.202	.622	1.11	.018	.033	1.110
3	Salcoats.	Black sandy loam.	13.54	.572	.213	.340	2.89	.025	.048	.531
4	Yorkton.	" "	14.01	.504	.211	.486	1.17			
5	Wolsley, N.E. ¼, Sec. 27.	Black loam (cultivated)	13.93	.514	.391	.555	.87	.005	.011	.306
6	" S.W. ¼, Sec. 27.	" "	10.98	.389	.369	.512	.76	.005	.018	.264
7	Indian Head.	Black clay loam. Taken to a depth of 4 inches	13.31	.409	.212	.863	1.26	.036	.070	1.187
8	" "	Black clay loam. Taken to a depth of 8 inches	12.83	.371	.234	.868	1.41	.032	.059	1.261
9	" "	Black clay loam. Taken to a depth of 4 inches (cultivated)	10.20	.259	.159	.839	3.44	.016	.039	1.384
10	" "	Black clay loam. Taken to a depth of 8 inches (cultivated)	10.70	.254	.163	.898	3.51	.013	.038	1.336
11	Vermilion Hill—Tp. 21, Rge. 5, W. 3rd	Dark brown sandy loam.	10.43	.354	.164	.164	.50	.044	.050	.383
12	Maple Creek, Sec. 16, Tp. 11, Rge. 26, W. 3rd	Heavy clay loam.	5.54	.134	.064	.300	1.06			



The following mechanical analysis of Saskatchewan soils was made by Dr. Edward J. Russell, Goldsmith Chemist, Rothamsted Experimental Station, Harpenden, England:

LOCALITY	Tisdale	Wolseley	Indian Head	Indian Head
No. of Sample	2	5	8	A†
Fine gravel* above 1 mm .....				
Coarse sand 1 mm.—0.2 mm .....	0.90	16.71	10.37	10.20
Fine sand 0.2—0.04 mm .....	24.15	14.85	13.68	9.95
Silt 0.04—0.01 mm .....	20.52	27.74	15.34	15.27
Fine Silt 0.01—0.002 mm .....	13.67	8.11	11.95	11.12
Clay below 0.002 mm .....	21.29	15.13	27.23	33.88
Loss on ignition .....	14.23	13.93	12.83	16.8

\*As the soil had already gone through a  $\frac{1}{2}$  mm. sieve the fine gravel could not be determined.

†Not included in series chemically analysed.

His opinion of the structure of the soils as deduced from the physical data is as follows:

"B. The Saskatchewan Soils.—The Wolseley soil is remarkable for the uniform distribution of the various grades of particles. There is neither deficiency nor excess of anything; there is enough sand to make the soil work easily and to keep it open, but not too much; there is enough clay and silt to give retentiveness and supply potash, but not enough to make the soil difficult to work. It is not very different from the Portage la Prairie soil and the remarks made there apply here also. Even if the organic matter were much reduced the soil would probably be easily cultivated; at the same time it is so useful a source of plant food that it should not be allowed to fall too low.

"The Tisdale soil owes its clay-like nature partly to the absence of coarse sand and partly to the rather large quantity of clay present. It contains no mineral material capable of keeping it open and friable but the abundance of organic matter present serves this purpose instead. The supply of organic matter must therefore be kept up.

"The Indian Head soils contain a large amount of clay, which, however, is tempered by the presence of 10 per cent. of coarse sand. It would still be somewhat intractable were it not so well supplied with organic matter and lime, both of which must therefore be maintained at a sufficiently high level."

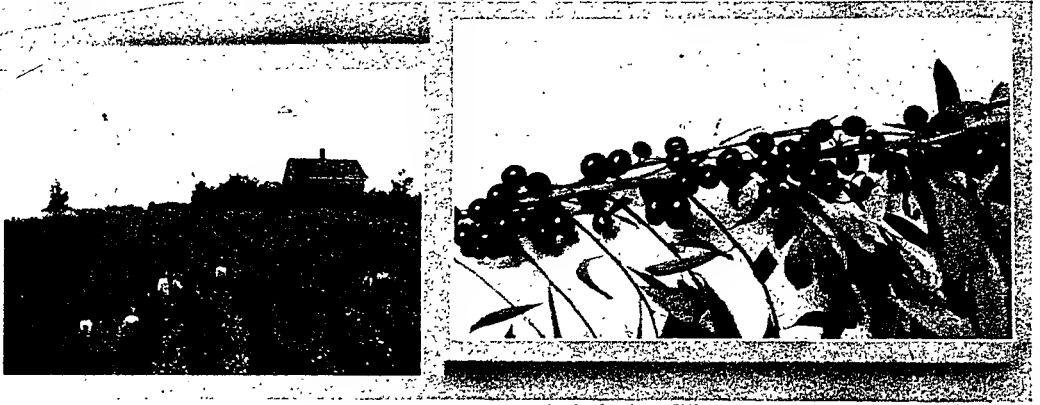
In concluding this review we may be allowed to again emphasise the general high average of the prairie soils, their richness in plant food, more especially in nitrogen, and their favourable physical condition due, chiefly, to the large proportion of semi-decomposed vegetable matter they contain. Further, that though the rainfall over a large portion of the prairies is not a generous one as judged by eastern standards, good yields may be obtained by fallowing, even in very dry districts. And lastly, that the climatic conditions usually prevailing in the prairie country are such as to bring about a rapid conversion of the stores of plant food into available forms without undue waste. They undoubtedly favour a luxuriant growth and early ripening of the crop.



Shelter Belts and Hedges

## CLIMATE

THE climate of Saskatchewan is marked by the striking contrast of two seasons only, winter and summer, bringing with them alternation of fruitful labour and of an enforced repose that is divided between profitable industry and pleasure. Spring opens at nearly the same time all over the country. Early in April the alders and willows are in leaf, and the eastern anemone covers the southern exposures to the very verge of the arctic circle. There is more summer heat in May than in the eastern provinces. The nights, however, are cool, and throughout the period of greatest heat, in July, the cool



Small Fruit Growing on the Prairie

night breezes beget a welcome and refreshing change, often accompanied by refreshing dews. This protects the cereals from the effects of drought, even in dry seasons, and produces a rich growth of prairie grass. As to the winters, undoubtedly they are cold and long, but on the whole they are health-giving, agreeable and singularly steady. The atmosphere and the snow alike are dry. The snowflake is hard and gritty and can be brushed off clothing like dust. No thaw, strictly speaking, takes place until spring except on rare occasions of a chinook, that is, a south-west wind. Usually spring advances very rapidly, for though the mean temperature during April and May

may be in the neighbourhood of 37 degrees, the average daily maximum would be at least 30 to 40 degrees higher. While the annual precipitation is comparatively light, the greater part of the rain falls



Conservatory at Government House

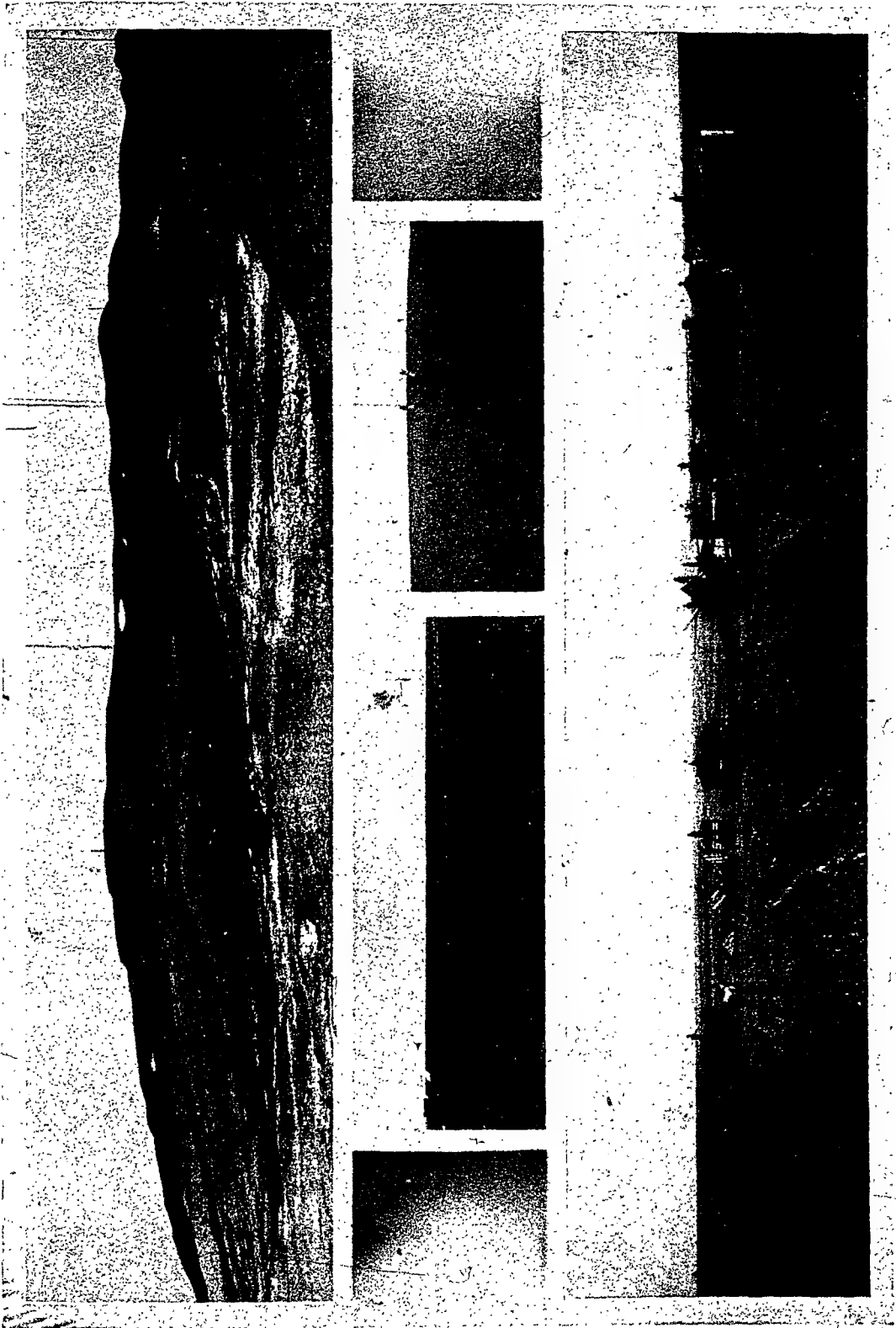
during the growing season, and hence is particularly effective agriculturally. The distribution has been found one that is well adapted to the production of the highest quality of wheat. Although the total annual precipitation only averaged 18.96 inches in 1911, the amount falling between April 1 and October 1 was 14.14 inches or 75.10 per cent. of the whole. This average is equal to the average for Ontario during the same six months.



## FARM WEALTH

WITH a wheat crop greater than that produced by the remainder of Canada and greater than the greatest crop of any small grain produced by any of the States of the Union, the province of Saskatchewan would appear to have reached its climax in grain production, but when it is considered that only sixteen per cent. of the arable land in the southern half or settled portion of the province is under cultivation, Saskatchewan can confidently look forward to making a record in grain production within the next decade that will make this province an unrivalled leader among the provinces and states for all time. It is not alone in wheat that the increase in yield has been so great. In ten years the oat crop has grown from 6,976,000 bushels to 107,620,000 bushels, barley from 293,600 bushels to 8,319,600, and flax from practically no production to 14,171,200 bushels. The crop production alone in 1912 represents a return of \$261 per capita of the total population of the province.

It is not only in the total production and average yield, but in the quality of its wheat that Saskatchewan holds the premier place amongst provinces and states of North America. Last year Saskatchewan grown wheat carried off the first prize at the New York Land Show for the best specimen of spring or winter wheat. The *Canadian American*, commenting on the event, says: "Interested and disinterested advertisers of Canada West have long made the claim that its soil surpassed all others in North or South America as a wheat producer. They have had good grounds for their repeated assertions of the country's present and future greatness, not the least substantial being the figures prepared by the government showing steady increase and improvement in quantity and quality of output from year to year. But champions of other agricultural regions have as persistently denied that nature has been kinder to Canada in the matter of fertility and richness than to the states across the border, or the extensive grain growing tracts of the far south. Samples of wheat, apparently as luscious and nutritious and hailing from other territories, have been going the rounds of land shows and expositions season after season to disprove Canada's boast of superiority. Canadians and Americans have been equally anxious to have the question properly adjudicated by experts.



Ranching and Farming Scenes.

At last a decision that must be conceded to be both fair and final was reached at the Land Show in Madison Square Garden, New York. "Farmers from all parts of the American continent competed for a prize of \$1,000 in gold offered by Sir Thomas Shaughnessy, President of the Canadian Pacific railway, for the best specimen of spring or winter wheat. The judges were three professors of agricultural science—one from Ohio, one from Kansas and one from Quebec. *The winner was a farmer from Saskatchewan.* The competitor with the next exhibit was a farmer from Alberta.

It was noticeable that the press of United States gave little or no space to this significant finding. Murders, suicides, graft, scandal and other such everyday occurrences crowded it out. There may be more important news items than this one to the masses of the people, but there can not be very many. The finest wheat in the New World, with its vast army of strugglers, grows in a land that is just beginning to be cultivated—that is barren only of population. Imagine the army of strugglers changed to an army of settlers in the prairie provinces, and you have the solution of the chief problem of the hour, which is the problem of bread and butter.

Canada's claim as the champion wheat producer has been vindicated by a jury of three experts—two of them Americans.

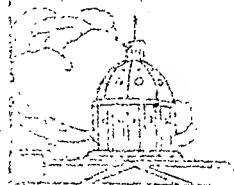
The previous year Saskatchewan grown oats carried off the \$1,500 prize in competition with the world at the National Corn Exhibition, held at Columbus, Ohio, and at the same show the reserve sweepstakes for the best peck of wheat also went to a Saskatchewan competitor.

The total value to the farmer of grain, root and fodder crops raised in 1912 was \$128,343,160.90 while to these figures may be added \$150,000,000 the value of the live stock on the farm.

### MARKET VALUES

ONE of the first questions to present itself in the mind of the intending settler will be with reference to the prices which he can obtain for his farm produce. In whatever branch of agriculture he may be about to engage, whether it be in grain production, live stock or poultry or dairy industries, he will naturally want to know what his product will realise in the nearest market.

There are a number of flour mills, and as a rule prices for milling grain is better at these points than elsewhere, but the mills take





only a small portion of our wheat, by far the greatest part of it being exported to the States or to Great Britain. England being the world's greatest market, prices are to a great extent determined by values on the Liverpool grain exchange. The prices given below are for produce on the farm, and with reference to grain, show the average price of all grades:

## FARM PRODUCE

Wheat .....	\$ .67	Oats .....	\$ .25
Barley .....	.35	Flax.....	1.00
Other grains .....	.50	Potatoes.....	.39½
Field roots.....	.43	Hay, per ton.....	5.00
Forage crops.....	5.50		

## LIVE STOCK

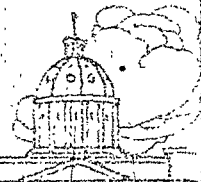
Horses.....	160.00	Milch cows.....	50.00
Other cattle .....	25.00	Sheep .....	4.75
Swine .....	10.00	Poultry .....	.50

## COST OF WHEAT PRODUCTION

THE figures given below, showing the cost of wheat production in the different districts into which the country has been divided for statistical purposes, are of great interest, and will be valuable information for the intending settler. These figures do not include the cost of hauling to the elevator or loading platform. The average cost of teaming is one-half cent per bushel per mile. It will be noticed that the working expenses are greater in the newer settled districts, where horses and outfits are scarce and difficult to secure. Threshing proved an expensive item in 1911 on account of the unfavourable weather, large amount of straw and wages paid. Wear and tear on machinery is also a considerable item, because of the lack of proper care, as so very few farmers house their machinery. Under the heading of "other items" are included binder twine, oil, etc.

It will be conceded that the total cost per acre for wheat growing in the province, given as \$10.13, allows of a handsome margin of profit for the operations of the farmer.

The cost of wheat production in Saskatchewan compares well with the cost in the United States. The Statistics Bureau of their Department of Agriculture quotes a cost during 1909 of from \$9.74 to \$11.15 in different States of the Union.



# COST OF WHEAT PRODUCTION.

THE following is a summary of the cost of producing wheat in 1911 in the province based upon the reports of 1,600 crop correspondents:

Crop District No.	Preparation of ground	Seed	Planting or Seeding	Cultivation	Harvesting	Threshing or preparing for market	Wear and Tear on Implements	Other items of cost	Total cost per acre
1.	\$ 2.93	\$ 1.38	\$ .51	\$ .56	\$ 1.04	\$ 1.96	\$ .45	\$ .49	\$ 9.35
2.	4.56	1.41	.54	.58	1.14	2.60	.53	.54	11.90
3.	4.17	1.18	.54	.54	1.14	2.15	.47	.49	10.68
4.	2.93	1.44	1.51	.49	1.25	1.99	.53	.47	9.61
5.	3.56	1.34	.53	.57	1.04	2.39	.49	.50	10.41
6.	4.61	1.35	.53	.52	1.05	2.44	.46	.46	11.42
7.	2.35	1.50	.40	.34	1.02	1.78	.42	.32	8.13
8.	2.42	1.38	.47	.52	1.24	2.36	.45	.53	9.37
9.	3.78	1.32	.48	.63	1.13	1.94	.54	.42	10.24
Province	3.48	1.37	.50	.53	1.12	2.18	.48	.47	10.13

## MARKETING GRAIN

**A**LL Saskatchewan grain is sold according to grades established by Dominion law. The inspectors, who are government appointees, decide the grade of all Canadian grain passing out of the country.

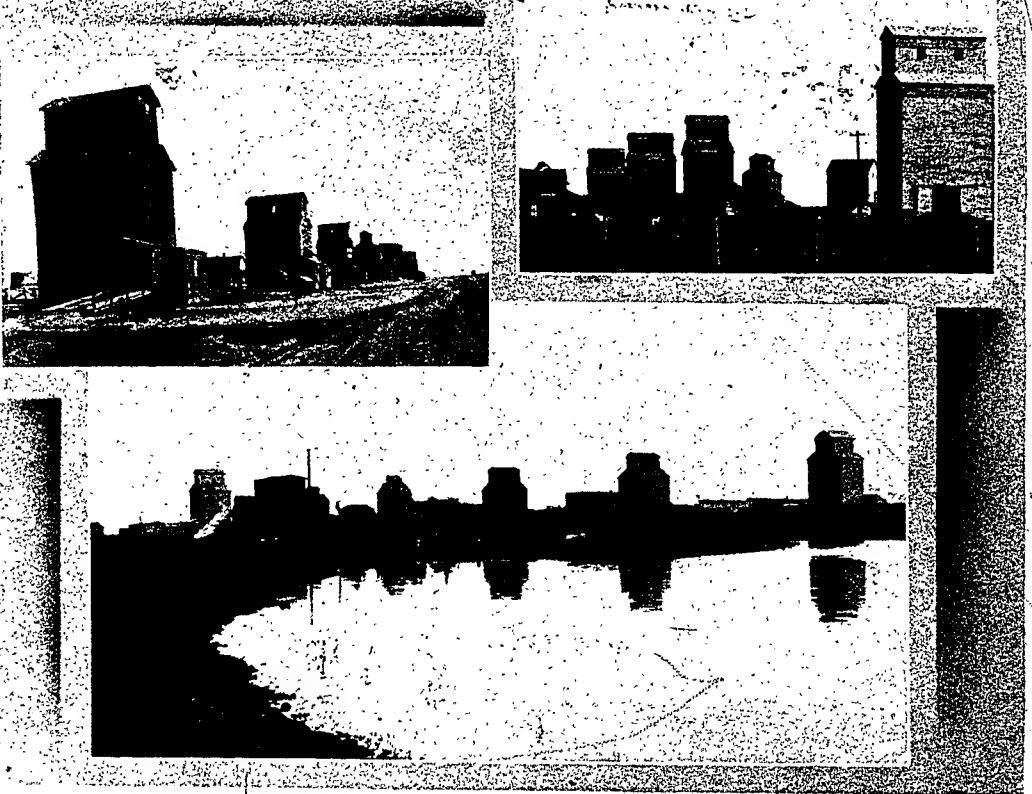
The handling and marketing of grain is a subject which has received the special attention of both Federal and Provincial Governments during recent years. Under the new Dominion Grain Act a commission of three members was appointed to administer the Act. They have the same extensive jurisdiction over transportation, inspection and interior and terminal storage of grain, that the railway commission has over railways. They may also, with the consent of the government, and on an appropriation being made for the purpose, lease, purchase or expropriate existing terminal elevators, or build new ones, should it be necessary to do so in order to protect the integrity of the grade certificate which has been placed upon the grain by the Inspection Department.

A large portion of the grain grown in Saskatchewan is handled through the interior elevators, situated at country points, which are owned by grain dealers, milling companies and farmers' companies. All grain dealers in the province must be licensed and bonded, thus securing the farmer against loss through either dishonest intention or financial embarrassment of the dealer.

Owing to the great dissatisfaction among farmers generally respecting the grading and weighing of their grain, and the dockage taken to cover cleaning by line elevator companies and milling companies owning interior elevators, the Saskatchewan Legislature appointed a commission in 1910 to investigate the grain business with a view to complying with the demand of the farmers that a system of elevators should be provided, free from the abuses which characterised the existing system.

This commission conducted a most searching inquiry into the conditions surrounding the grain business. Local, provincial and world wide conditions were investigated in a most thorough manner, the evidence taken and the conclusions reached being embodied in a report to the government. This report recommended that special

legislation be enacted, providing for the creation of a co-operative organisation of the farmers, assisted in the matter of finance by a government loan, the managing body of which should be wholly elected by the farmers themselves, without any government interference. At the session of the Legislature early in 1911, a bill was passed creating the Saskatchewan Co-operative Elevator Company. The Act provides that the farmers tributary to a point where an



Some Country Elevators

elevator is needed, shall subscribe for shares in the company to the total amount of the cost of the elevator, and pay up in cash 15 per cent. of their subscription. It is also necessary for the shareholders tributary to the proposed elevator to have a crop acreage among them at least equal to 2,000 acres for each 10,000 bushels of elevator



capacity required, thus ensuring the success of the elevator. Upon these conditions as to shares and crop acreage being fulfilled, the Act authorises the government to loan to the company the remaining 85 per cent. of the cost of the elevator which loan is repayable in 20 equal annual instalments. A further provision was that the Executive Committee of the Saskatchewan Grain Growers' Association should be the provisional directors of the company and be responsible for the organisation of it.

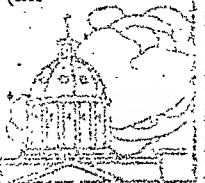
So well did the farmers of the province respond to the efforts of the provisional directorate that 46 "locals" were established and elevators provided during the same year that the legislation was enacted. The company is now strongly organised, with central management and local advisory boards. Early in 1912 an order was placed for ten million feet of lumber to be used in elevator construction, and the season closed with 139 elevators representing storage capacity of four and a quarter million bushels.

The effect of this institution upon the grain business of the province can hardly be estimated, for by giving the farmers a "square deal" itself, competing line elevators are compelled to do likewise, and the conditions surrounding the marketing of grain have become vastly improved from the standpoint of the producer.

There are few stations in Saskatchewan at which there are not one or more elevators. A farmer may deliver his wheat to the elevator and receive cash for it; or, if he prefers to hold his wheat for a time with a prospect of obtaining a better price for it, he may store it in the elevator and secure a storage ticket setting forth that he is entitled to a stated number of bushels of wheat of a certain grade; or, if he prefers to load his grain into a car without dealing with the elevator he may do so. Loading platforms on which the farmer may drive with a load of wheat and load directly into the car, have been erected at nearly all shipping points in order to facilitate the handling of grain, and give any farmer having even a few hundreds of bushels of grain to sell the privilege of an alternative method of shipping.

In 1901 the capacity of all elevators in the area now comprised in the province of Saskatchewan was 2,987,000 bushels. This has increased annually, and with remarkable rapidity. At the end of 1911 there were 1,009 elevators with a total capacity of 29,500,000 bushels.

The average price received by the farmers for the wheat crop (all



grades) of 1912, was 67 cents per bushel of 60 pounds, which means that the wheat crop was worth to the producers \$71,802,359. The oat crop of 1912 at an average price of 250 cents per bushel was worth to the producers \$26,904,987. Published or quoted prices are usually for grain in store at Fort William or Port Arthur, the cities on the great lakes where the terminal elevators are located. Consequently it is necessary to deduct freight, inspection, weighing charges, and selling commission from published quotations in order to arrive at the cash value of grain at any local point in Saskatchewan.

The tariff of freight charges on grain from stations in Saskatchewan to Fort William or Port Arthur is from 16 to 20 cents per 100 pounds, or from  $9\frac{1}{2}$  to 12 cents a bushel for wheat, from  $5\frac{1}{2}$  to 7 cents per bushel for oats, from  $7\frac{3}{4}$  to  $9\frac{3}{4}$  cents per bushel for barley, and from 9 to  $11\frac{1}{4}$  cents per bushel for flax. The inspection and weighing charges and commission together amount to about 1 cent per bushel of grain.



## SOME FARMING METHODS

THE conditions under which grain matures in Western Canada are different from those of the States to the south. Being much farther north, the season is shorter; but to make up for the short season the days are longer. In June one can read without artificial light from 3.30 a.m. until 9.30 p.m. The average precipitation in Saskatchewan is seventeen inches per year, with twelve and a half inches during the growing season. Consequently a modification of the dry farming system is employed, and the most successful crops of wheat are grown on land ploughed in June or early in July, and disced, dragged and rolled, thereby thoroughly eliminating weeds and conserving the moisture. Then for the next two or three years crops are grown. The second and third crops on this summer fallow are produced with large profit.

The breaking of the prairie and planting of crops is done in various ways. The settler with limited means, farming a quarter section often breaks with an ox team, costing from \$150 to \$250, until he can better afford to invest in horses. Those who are farming on a big scale, and breaking large areas, use steam power, and accomplish the work at from \$2.50 to \$3.50 per acre. Very little of the land has to be cleared, as by far the largest area is open prairie. Park lands, so called from the clumps of small poplars and willows growing in groups, are found in some localities, but this brush is small and easily cleared.



Slow but Sure



## LIVE STOCK

THE native feed that sustained millions of buffalo, antelope, elk and moose that formerly roamed the prairies, still remains and is available today for the stock of settlers. It is the richest native fodder known. In the opinion of experienced stockmen and feeders cattle can be developed earlier on the western Canadian prairies than anywhere else. Each year thousands of two year old steers are imported into Saskatchewan from Texas and other western States of the Union and placed upon ranches in this province. When in prime condition they are shipped back to the Chicago stock market as beef cattle. There were 592,220 horses, 258,235 milch cows, 562,590 other cattle, in addition to thousands of sheep and swine, in the province in 1912. While the live stock industry has not kept pace with that of grain growing the farmers and stockmen are beginning to recognise their opportunities and are improving their beef and dairy herds. Stock breeders' associations have been organised. The government maintains a live stock department under the direction of a commissioner, and inspectors at the principal shipping points to guard the interests of the cattle men during the shipping season. Less than 17 per cent. of the arable land in the southern half or settled portion of the province is under cultivation and nearly all of that at present being passed over combine grazing and farming land, with enough of the latter to support in winter as much animal population as the grass will summer; in other words, it is well balanced for live stock industry.

It is a mistake to suppose that there will be any lessening in the demand for farm horses on account of the increased use of tractors. The tendency of farming is toward the small farm and the tractor is only bringing under cultivation land that will need our horses to farm after it has been broken.

An Act has recently passed the Legislature to encourage the use of a better class of stallions. We have perhaps more fine draft horses than any other province, but the supply is not nearly equal to the demand. Clydesdales are by far the most popular, and of sires of this breed there are about 1,200 registered. There are many importers who scour the horse markets of Scotland and elsewhere in order to secure the best possible sires.



The price of teams is high. Horses weighing about 1,500 pounds will fetch from \$250 to \$300, and as many of the settlers who arrive annually in such large numbers bring no horses, there is always a good demand.

At the end of 1911 there were 1,936 pure bred and 1,730 grade stallions, but as the law did not require annual re-enrolment it was impossible to know if this number was accurate or not. In 1912 a new Horse Breeders' Act came into force calling for annual re-enrolment. This process has not been completed for this year, but it is certain that the number of stallions has much increased.

The arrangement with the Government of Alberta under which a joint Brands Record Office for the two provinces was maintained has now been terminated, and on December 1, 1911, the



A Fine Brood Mare and a Group of Draught Horses

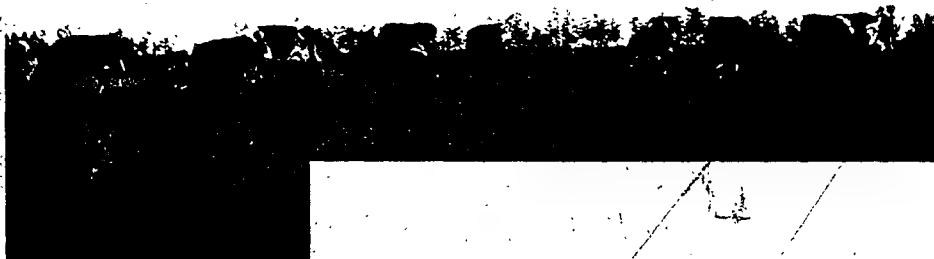
brand records of Saskatchewan were transferred to Regina and will be kept in the Department of Agriculture in future.

Formerly the brands upon all stock to be shipped had to be examined by a stock inspector, but under an amendment to The Stock Inspection Act the area in which this inspection is necessary was changed from the entire province to that portion west of range 17 west of the third meridian and south of township 30. As range conditions scarcely exist outside of this area, and as inspection of brands is only necessary when stock are kept under such conditions, the inspection of brands throughout the rest of the province was no longer necessary.

## RANCHING

**W**HILST large areas of land, particularly in the south and south-western part of the province, are pre-eminently adapted to this method of stock raising; yet the day of the rancher in Saskatchewan is practically over. The large number of settlers and homesteaders that annually enter the province are gradually reducing the grazing lands until at the present time the industry is by no means extensive and within a decade or so, at the present rate of settlement, will probably cease to exist entirely. This situation is not without its drawbacks as, whilst the large herds and flocks are being scattered, the average farmer has not yet begun to keep stock in quantity enough to make up the deficit, and consequently the numbers of live stock in the province are not, numerically, developing proportionately with the grain growing section of the agricultural industry. A healthier state of affairs is, however, being established; larger numbers of the small farmers are going in for stock and the demand for pure bred sires of every class and breed is greater than ever before. The dairy industry is also being firmly established in many sections, largely assisted by the present government creamery system, and the infusion of pure bred dairy stock from Eastern Canada. Some parts of the province are especially adapted to dairy farming, which is becoming more and more popular especially in the east central and north-western portions of the province. Owing to the large and steady increase in population the demand for all classes of live stock products has increased tremendously. This has had the effect of giving a steadier market with a higher average price. During the last year the price fluctuations in the west were less than ever before. This is a good augury for the future of the industry.





## SHEEP

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**A**S in other classes of stock, sheep have not increased numerically during the past two years, but a larger number are in the hands of small farmers throughout the country; and the number of pure bred rams and ewes which have been brought in for breeding purposes has increased rapidly. In 1909 there were only 20 registrations at Ottawa from this province, whilst in 1912 there were 350. These figures will give some idea of the rapid permanent development of this industry. Prices during the past year have averaged nearly 5c per pound, live weight, for mutton, and 6c for lamb, which, taking the added income from the wool clip into consideration, is a very profitable figure. Probably two-thirds of the province is admirably adapted to sheep raising, and every encouragement is being offered the would-be sheep breeder to take up this work, which is profitable not only on account of the returns accruing from the animals themselves, but also from the fact that they are easily kept, require no elaborate buildings and are persistent weed destroyers, eating and thriving on 260 of the known 300 odd kinds of weeds in the province. The English Down breeds are preferred on account of their hardiness, prolificacy and early maturity. The nucleus of a breeding flock can be purchased for \$125.00, consisting of 12 ewes and a pure bred ram. The demand for wool and mutton is consistent and within the next generation this province bids fair to become a noted sheep raising centre.

## SWINE

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**C**ONSIDERING the fact that the average live weight price for hogs during the year ending July 1, 1912, has been about 8c, and also that this class of stock can be raised as economically and profitably in this province as anywhere in North America, there should be, and is, good money in hog raising. Saskatchewan has demonstrated that her fields can grow alfalfa, roots of all kinds, rape and barley as well, if not better than, any province in the Dominion and experts all agree that in order to make a success of hog raising it is necessary that roughage can be raised cheaply and in abundance. The bacon type of hog is preferred, the Improved

Yorkshire being probably the greatest favourite; but the lard type is also coming into prominence and breeders are proving that this latter kind can be profitably raised in the wheat belt of Saskatchewan as well as the corn belt of the United States. Besides the Yorkshires; Berkshires, Tamworths, Duroc-Jerseys, Chester Whites and Poland-Chinas are all to be found making money for their owners. The large western packing plants, not to mention the greatly increased local demand, render long shipment by rail unnecessary, and here as well as elsewhere the hog is proving itself one of the best mortgage lifters the farm has known.

### DAIRYING

THE dairying business is being built up on solid foundations, and under the careful supervision of the Provincial Department of Agriculture, has made very gratifying progress. The policy and method of the department is as follows:

Unwise promotion of creameries or factories is discouraged. Before being incorporated there must be a capitalisation of at least \$8,000, of which 75 per cent. must be subscribed, 33 per cent. of the subscribed stock paid in cash, and the balance secured by approved notes. On the government being satisfied that there is a fair prospect of success, the Lieutenant Governor may authorise a loan of not more than \$3,000, repayable with 3 per cent. interest in not less than two



A Government Operated Creamery

and not more than six years. The plans and specifications of the creamery company must be approved, and also the site and location. This is to prevent undue competition and to guard against unsanitary conditions. The policy of centralising judiciously the creamery work was introduced four years ago, and the results have proved its wisdom. The justification of the course lay in the fact that in a territory near a creamery, there was not sufficient cream to warrant profitable operation, and it was recognised that shipments of cream by rail from adjacent territory should be encouraged rather than the formation of companies for the erection of new creameries. To encourage this centralisation of creamery work, the government pays the express charges on cream shipments. This places the farmers up to 75 miles away on the same footing as those living near the creamery. A large make of butter is under competent control, expenses are reduced, and the farmers consequently receive better prices for their product.

The increase in the make of butter is almost half a million pounds in four years, and the number of farmers supplying cream has risen from 553 in 1908 to 1,576 in 1912.

Four years ago none of the creameries did business in the winter, but last year they all continued operations. The province is divided into two districts, with a dairy instructor in charge of each. Their duties are educational, and they endeavour to make the farmers pay attention to the matter of cleanliness and care of the milk and cream. They give information and encourage interest in the dairying industry, demonstrating how important it is that the farmer should take the greatest care of the raw material in order that the finished product should be thoroughly first class.

The farmers have had satisfactory and practical proof that there is both profit and safety in co-operative dairying in this province, and also that the creameries have been well conducted, or otherwise such a marked increase would not have been possible.

In 1908, the first year that this policy was adopted, the total make of butter was 220,282, and in 1912 this production was increased to 737,340 pounds. During the last year there were thirteen creameries in operation in the province, nine of them under government operation. At the end of 1912 seven creameries had a government loan, or a portion of one outstanding, the aggregate amounting to \$11,879.30, but no portion of any such loan was overdue; two creameries have paid off their entire loan from the government.

There is a steadily increasing tendency on the part of our farmers to carry on winter dairying as the gratifying increase in winter operations at the creameries proves. Winter dairying is satisfactory and profitable because labour is cheaper and more plentiful than in summer; because there is more time for close and intelligent supervision; because roughage and coarse feeds are easily and cheaply produced; and, lastly, because the average price obtained for the output of the creameries is  $5\frac{1}{2}$  cents higher in the winter than in the summer season.

### POULTRY

There are five million birds in the province and yet more than seventy-five per cent. of the egg supply is imported.



The Good Saskatchewan Hens

## LAND AREAS

**S**ASKATCHEWAN has 151,900,000 acres, of which 66,600,000 have been surveyed; 13,220,027 acres are under cultivation or summer fallowed; railway and land companies own 37,100,000 acres. There are 20,828,328 acres homesteaded, and 21,690,297 acres surveyed and ready for homesteading at the present time.

The area of Saskatchewan is divided as follows:

Total land area.....	66,003,630 acres.
Area of water covered lands in surveyed sections.....	1,586,376 acres.
Area of road allowances.....	1,374,900 acres.
Area of river lot settlements.....	81,974 acres.

Surveyed land is divided into townships. Every township is about six miles square, and is divided into 36 sections of one square mile (or 640 acres) each. These sections are subdivided into half sections of 320 acres, and quarter sections of 160 acres, and lastly into quarter quarter sections called legal subdivisions. The 36 sections in every township are numbered from 1 to 36.

## LAND VALUES

**T**HE value of land has increased very rapidly during late years, and in 1912 the increase in the value over the two previous years is fully 25 per cent. The average price of improved land runs from \$23 to \$30 and for unimproved from \$15 to \$21 per acre.

Unimproved land can be bought in almost every district, and the prices depend more on the situation of the land than on the quality, land in older settled districts and nearer to a railway being naturally more expensive.

District	Improved Lands	Unimproved Lands
South Eastern.....	\$21.20—28.56	\$15.57—21.00
South Central.....	28.38—35.15	19.41—25.82
South Western.....	23.61—29.21	15.29—21.65
East Central.....	21.29—29.73	13.75—20.12
Central.....	27.50—35.00	19.50—25.50
West Central.....	21.50—26.50	15.50—20.50
North Eastern.....	21.00—27.00	14.00—19.00
North Central.....	31.00—39.00	16.00—22.00
North Western.....	20.00—27.00	14.00—20.00
Province	<u>\$23.95—30.80</u>	<u>\$15.90—21.73</u>



## A NEW LAND POLICY

**I**N 1908 a great change was inaugurated in the land settlement policy. Prior to that date, the government held to the policy of reserving all odd numbered sections to be granted as encouragement to, and aid in the building of railroads, so that up to September, 1908, homestead settlement was confined to even numbered sections only. When the Liberal government took office in 1896, their policy was that all agricultural land should be thrown open to settlement, and no land granted to railroads, and as they defaulted in the earning of land grants, their rights were cancelled. The Land Act of 1908, gave the final expression to that policy, and since that date both the odd and even numbered sections became available for homesteads. Another great change was the introduction of the pre-emption system. Under this plan the man who already had a homestead is allowed to purchase another at the price of \$3 per acre within a certain area. The man just taking up his first homestead in this area, is allowed to purchase an adjoining quarter section, so that by doubling the terms of improvement required on a homestead, and by the payment of \$480, he is able to get 320 acres, instead of 160 as would otherwise be the case. The result of the policy has been an extraordinary increase in the rate of settlement, and is conclusive proof of its wisdom.

## ACTIVITY OF LAND COMPANIES

**A**NOTHER method by means of which large numbers of farmers have been brought into the province is through the business activities of a number of land companies. These companies, composed of Canadian and American business men, purchase very large tracts of land in the province, chiefly from the railways, and resell in farm lots to eastern Canadians and to American farmers of the western States. The fact that land can be purchased in this province at from \$12 to \$20 per acre, while in their own states it cannot be obtained at less than from \$100 to \$175 per acre, is enticing a large number across the border. These land companies have settlement

departments in the more important cities of the agricultural states and when a sufficient number of land seekers is listed a special car is provided to convey them to Canadian points nearest to the company's lands, and from there they are taken in automobiles over the land. The company looks after them until they are located.

The total acreage of pre-emptions and purchased homesteads entered for in the Province of Saskatchewan, from the date of the passing of the Dominion Lands Act, 1908, to December 31, 1911, was pre-emptions 5,204,000 acres, purchased homesteads 569,920 acres.

This homestead region does not include vast areas which still exist in the northern portions of the province, and which are still to be drawn upon for homestead entry as soon as the government obtains full information as to the agricultural possibilities of the country and completes the surveys. There are millions of acres still untouched, all of which are capable of growing to advantage the grains which are now raised in the settled portions. This also does not include the lands which have been purchased from parties other than the Dominion government. As a result it does not include the bulk of the American immigration. The most of these American settlers purchased farms in the best localities, and did not select the temporary inconvenience of locating homesteads.

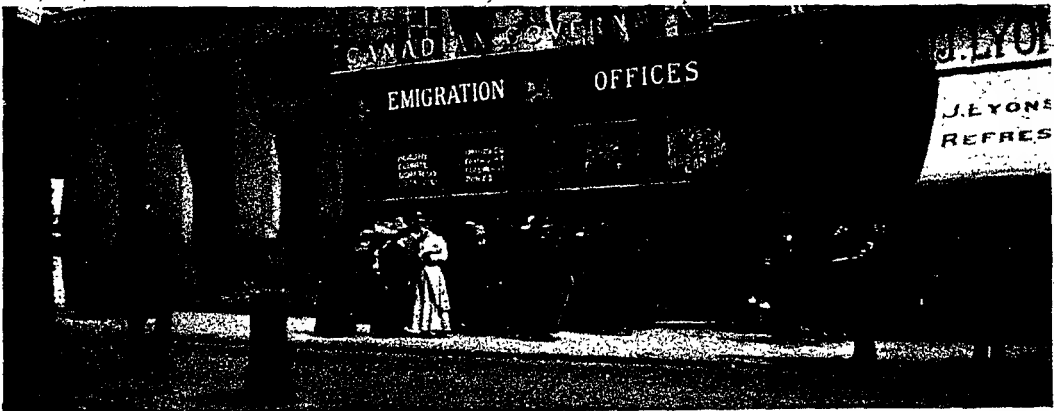
There have been more homesteads entered upon in Saskatchewan than in all the other western provinces combined. Its total for the year ending March 31, 1911, was 31,308, as compared with 27,195 in the year preceding.

A concrete illustration of the immigration to this province of not only foreigners but farmers from the eastern provinces of the Dominion and from the United States is furnished by the casual observance of the number of carloads of settlers' effects that passed through during the month of March, 1911, on the Canadian Pacific railway and Canadian Northern railway. The Canadian Pacific railway handled four hundred, and the Canadian Northern railway three hundred carloads of settlers' effects. Immigrants are coming to Saskatchewan at the rate of 40,000 per year. In 1911 44,082 settled in this province. Of this number 10,692 came from the British Isles.

## IMMIGRATION

**A**FTER us cometh a Multitude. Prosper the work of our hands  
That we may feed with our land's food The folk of  
all our lands. *Kipling—"The Settler."*

One of the most extraordinary things about the immigration which is pouring into our province is the great mixture of nationalities of which our population is being made up. Every nation in Europe sends its representatives, many of them endowed with nothing but their brawny muscles, and a strong determination to make good in the country of their adoption. The continental immigrant



Emigration Offices, London, England

finds new habits, new customs, a new language and everything to handicap him heavily at the outset. The Galician, the Austrian and the Polack generally gets work on some of the vast amount of railroad construction work, and settles down into his place, with a praiseworthy desire to give up his old customs and become a Canadian. They have as a rule no very definite destination, stopping wherever opportunities seem best.

Large numbers of Americans have arrived of late years. Many of these, having sold their holdings in the States, arrive here well equipped for their new venture with money, stock and implements, and soon make their way, being already farmers. From the British Isles, but few of the immigrants are farmers, the majority being

tradesmen or professional men of one sort or another—an army chiefly from the lower middle class, with an ambition of finding a home where their efforts will be justly rewarded.

This miscellaneous collection of peoples will soon be woven into the fibre of the nation, and must result in the formation of a strong, industrious and enterprising people.

It is curious to note how certain districts have been the objective point of the wave of settlement for two or three seasons until the land was all taken up. Then the tide would flow to some other district. Nothing could divert the movement until almost all the homesteads were taken. For instance Moose Jaw and the district south-west has been the centre of attraction for some years and the flow of immigration extended to the boundary, to Swift Current, and then north over the Saskatchewan until it met another wave of settlement from Saskatoon down the Goose Lake line.

On the transcontinental trains with the first class cars are colonist cars, convertible into sleeping cars at night, with upper and lower berths. No extra charge is made for this sleeping accommodation. Passengers must provide their own bedding, and it can be procured from the agent of the company at the point of starting at a cost of \$2.50, or ten shillings. The trains stop at stations where meals are served, and good and well cooked food can be procured at reasonable prices. All trains are met upon arrival at Winnipeg by agents of the Government and the railway companies, who give colonists all the information and advice they require in regard to their new home.

There are no free, assisted or nominated passages provided by the Canadian Government.

The average third class rate from a number of British to Canadian ports is \$30 to \$32, second cabin, \$40 to \$42. Summer fares from Quebec to points in Saskatchewan average from \$20 to \$30.

An immigrant requires on landing during the months of March to October \$25 in addition to railway ticket to destination and \$50 between months of November to February. Unless:

(a) An immigrant, if a male, is going to assured employment on farm work, and has the means of reaching the place of such employment; or

(b) That the immigrant, if a female, is going to assured employment at domestic service, and has the means of reaching such place of employment; or

(c) That the immigrant is one of the following descriptions, and is going to reside with a relative of one of the following descriptions, who is able and willing to support such immigrant, and has the means of reaching the place of residence of such relative:

(i.) Wife going to husband, (ii.) child going to parent, (iii.) brother or sister going to brother, (iv.) minor going to married or independent sister, (v.) parent going to son or daughter; or

That the immigrant is a railway construction labourer who is guaranteed employment by railway contractors or companies, and is mentally, morally and physically fit.

Immigrants should not land with this object in winter when railway construction work ceases to a great extent.

### THREE NEW DISTRICTS

*Melfort and Carrot River.*—There are about 5,000 homesteads available in this district, lying in the fertile valley of the Carrot river. There is a good deal of timber, interspersed with open prairie, with a rich black loam soil of good depth. Good water is obtainable at from 10 to 20 feet, and there are many small tributaries of the Carrot river.

*Prince Albert and Hudson Bay Route.*—There are about 11,500 homesteads available, most of them being to the north-east of the rapidly growing city of Prince Albert. There are many stretches



First Anglican Church Service for new West of England Settlers at Shellbrook

of open prairie, but the main portion requires a certain amount of clearing. Prairie and bush fires have already cleared many areas, and the soil is a first class black loam of splendid depth, insuring fertility for many years. There is a ready market for all farm produce both in Prince Albert, and in the numerous logging camps. It is well watered by several streams.

*Shellbrook, Marcellin and Big River.*—Since the late extensions of the Canadian Northern railway, some 6,000 homesteads are available in this division. The area comprised is a park country, as the timber, though sufficient for building and fencing, is in small clumps. The soil is of good depth and of first class quality.

### HOW TO GET A FARM

THERE are several ways which the newcomer may adopt in order to secure himself a farm. He can homestead 160 acres, and has the right to an additional 160 through pre-emption by paying through a term of years \$3 per acre. He may be able to lease an improved farm in the older settled districts. In this case the rent will to a great extent depend upon the number and condition of the buildings, the amount of land cultivated, the fencing and other improvements. Then he might buy on the crop payment plan, when he would have to pay down a considerable amount of cash, and afterwards deliver at the nearest elevator one-half the crop until the land is paid for. The purchaser runs little risk, if the land is good and not too far from the market, as with ordinary luck his labour is well paid for and in a few years he will own the farm.

If he desires to purchase outright he may either buy an "improved" farm, or secure land from the Canadian Pacific railway, the Hudson's Bay Company, the Saskatchewan Valley Land Company or one of the smaller private land companies that have purchased their holdings from one of these larger concerns.

### HOMESTEAD REGULATIONS

FOR the information of those about to take up land in our province, a few facts about the regulations in force and the steps necessary will prove of interest.

The province has been divided by the Dominion Government into ten districts, with a Dominion Lands Office in each.

The districts are as follows:

Battleford, Estevan, Humboldt, Medicine Hat, Moose Jaw, Prince Albert, Regina, Saskatoon, Swift Current and Yorkton.

On application at any of these offices, the officials will give free of expense not only information as to the lands open for entry in that district, but also advice and assistance in obtaining land likely to suit the applicant.

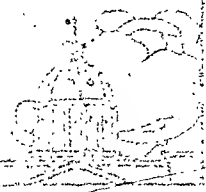
The following is a brief synopsis of the regulations with which it is necessary to comply before patent is issued for the homestead or the pre-emption. The homestead duties are: (1) residence thereon for six months in each of three years; (2) cultivation of 30 acres, a reasonable proportion being done, each year; (3) the erection of a house worth at least \$300, when making application for patent. The homesteader becomes entitled to patent for pre-emption by: (1) Residence for six months in each of six years on either homestead or pre-emption; (2) erecting a house on homestead or pre-emption to be worth \$300; (3) cultivating 50 acres in addition to the 30 acres on homestead, in all 80 acres, a reasonable proportion to be done each year; (4) paying for pre-emption at rate of \$3 per acre, payable one-third three years after date of entry, balance in five equal annual instalments, with interest at 5 per cent. from date of entry, payable yearly.

The number of homesteads available in the different districts on January 1, 1912, was as follows:

Battleford.....	13,200	Estevan.....	2,000
Humboldt.....	3,800	Medicine Hat.....	5,000
Moose Jaw.....	8,300	Prince Albert.....	22,500
Regina.....	400	Saskatoon.....	2,900
Swift Current.....	22,300	Yorkton.....	3,700

#### COST OF SETTLING ON 160 ACRES

Roughly speaking the cost of settling on 160 acres or less is from \$1,300 to \$2,000, not including a homestead fee of \$10 and the cost of the land, if any. The higher scale enables horses to be bought instead of oxen and provides for greater comforts and larger operations; seeders and self-binders, for instance, are not actually necessary on new land the first year. The following figures are fairly approximate:



House and sheds .....	\$250 or \$450	
Team of two horses or oxen .....	300	500
Harness .....	30	30
Wagon .....	80	90
Plough .....	20	20
Harrows .....	15	15
Seeder (press drill) .....	100	120
Self binder .....		155
Mower and rake .....	95	95
Household furniture .....	85	85
Provisions for one year .....	150	200
Seed for twenty acres, about .....	20	20
Feed oats and hay .....	75	75
Milch cows .....	80	160
Pig .....	10	10
Fowls .....	5	5
	<hr/>	<hr/>
	\$1,315	\$2,130
Cooking stove and utensils .....	22	35

#### PRICES OF OTHER ARTICLES AND STOCK

Lumber, per 1,000 ft. ....	\$10.	to \$20.
Binder twine, per lb. ....	.12	.16
Cutting and binding, per acre .....	.50	.60
Threshing, per bushel .....	.06	.08
Heavy breaking plough .....	50.	85.
Disc harrow .....	25.	
Mower .....	60.	70.
Hay rake .....	20.	40.
Sleigh .....	25.	
Milch cow .....	30.	45.
Cattle .....	28.	40.
Sheep .....	6.	8.
Bricks, per thousand .....	13.	20.

The following laws and regulations will be of interest to settlers:

#### *Timber Regulations.*

Licenses to cut timber are disposed of by public auction, except that an actual settler may obtain a permit to cut timber for his own use, upon payment, but without public competition. Homestead



settlers, whose land is destitute of timber, may upon payment of an office fee of 25c procure from the Crown timber agent a permit to cut the following timber free of dues:

3,000 lineal feet of building timber.

400 roof poles.

500 fence posts.

2,000 fence rails.

They may also cut limited quantities on forest reserves at low rates. In cases where there is timbered land in the vicinity available for the purpose, the homestead settler, whose land is without timber, may purchase a wood lot, not exceeding 20 acres in area, at the price of \$5 per acre.

The chief timber areas in the province are Moose Mountain, Wood Mountain, Cypress Hills, Touchwood Hills, Battleford and Prince Albert. The timber is mainly spruce, tamarack, poplar, birch and pine.

#### *Grazing Leases:*

A grazing lease is for not more than 21 years or more than 100,000 acres. The rent is 2c per acre, and the lessee must, in each of the three years from the date of the lease, place on the land not less than one-third of the stock required, namely, one head of cattle or five head of sheep for every twenty acres.

### NATIONALITIES OF HOMESTEADERS

THE following table showing the nationalities of homesteaders during the past year is interesting as showing the very miscellaneous character of the immigration which Saskatchewan is receiving.

The nationalities of homesteaders during the months of January to November, 1911, as reported by the several agencies of the Department of the Interior, in Saskatchewan, were as follows:

Nationality	Number
Canadians.....	5,503
Persons who had previous entry.....	695
Americans.....	5,205
English.....	2,957
Scotch.....	401
Irish.....	160

French.....	208
Germans.....	380
Belgians.....	104
Swiss.....	22
Italians.....	20
Roumanians.....	122
Syrians.....	47
Austro-Hungarians.....	1,143
Hollanders.....	31
Danes (other than Icelanders).....	74
Icelanders.....	24
Swedes.....	455
Norwegians.....	669
Russians (other than Mennonites and Doukhobors).....	925
Other nationalities.....	34

### THE LABOUR MARKET

THE labour market generally is divided into three classes, viz., farm labour, artisan, and unskilled labour. In the past, farm labour, including both outside and domestic help, was about the only class of labour in constant demand, but the great industrial and mechanical development of recent years has created a small but ever-growing demand for labour in the various classes of the building trades, also unskilled labour in the cities, railway construction camps, and logging camps.

Farm labour, however, still furnishes the most important and regular market in Saskatchewan for labour. Men are employed in many cases for the whole year, but some farmers who have not work for men throughout the whole twelve months engage them only for the crop season, or from April to October. During these months the crops are grown, harvested and threshed, and many farmers are able before November to market the greater part of their grain. When men are employed for the twelve months' term they are paid from \$25 to \$35 per month with board and lodging. These are extremes, however, and an average would probably be \$30 per month for good men. When employed for only eight months the wages are higher, and other things being equal would average from \$31 to \$45 per month. For only harvesting and threshing, men are paid from \$45 to \$65 per month, or \$3 to \$4 per day.

In the four cities and the larger towns there is during the spring, summer and fall months a demand for artisans and mechanics of the building trades. This demand, however, is by no means steady or regular, but fluctuates according to the general conditions controlling the building season, therefore artisans and tradesmen contemplating coming to Saskatchewan would do well to first obtain reliable information as to the conditions then prevailing in their respective callings. A working day generally consists of ten hours, although in some cities a shorter day prevails.

The rates for wages for the province in the principal trades are on an average, about as follows: Bricklayers, stonemasons and stone setters, 55 to 70 cents per hour; carpenters, 35 to 50 cents per hour; plasterers, 55 to 70 cents per hour; electrical workers, 30 to 45 cents; painters, 30 to 45 cents; plumbers and steamfitters, 55 to 65 cents, and common labour 20 to 27½ cents per hour.

In addition to the ever increasing need for farm help, unskilled labourers are also in considerable demand during the summer months in the cities and towns, where they are employed in large numbers as building labourers and upon civic improvements, such as extension of waterworks and sewerage systems, street paving, etc. Many of these men, especially the unmarried, go to the logging camps in the northern part of the province for the winter months, thereby securing employment for practically the whole year. There is, also, it is true, a good deal of railway construction work that utilises large numbers of men, but they usually are hired by contractors at Winnipeg or at points further east. But homesteaders with teams are often employed to do work of this nature, and are able thus to supplement the revenue from their agricultural operations, which in the early years is usually small. It should be remembered, however, that only settlers near the route of the new railway lines can best take advantage of such opportunities.

Domestic servants are always in demand, their wages averaging about \$17.50 per month and about \$200 per annum.

The general conditions surrounding labour in Saskatchewan are very favourable. A Factories Act is in force which ensures the safety, comfort and health of all employees in factories. Saskatchewan has also recognised the principle of compensation for workmen for injuries, and has recently placed upon her statute books an Act giving effect to this principle. A Bureau of Labour has recently been established. Its object is to collect information and statistics

relating to employment, wages and hours of labour, strikes or other labour difficulties, co-operation, trades unions, labour organisations, the relations between capital and labour, and other subjects of interest alike to the employees and employers of the province. This bureau will also supply any and all information to those who make inquiry regarding any phase of the labour question in Saskatchewan.

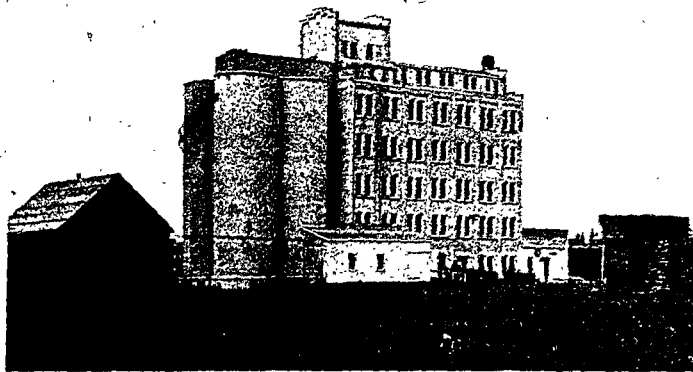
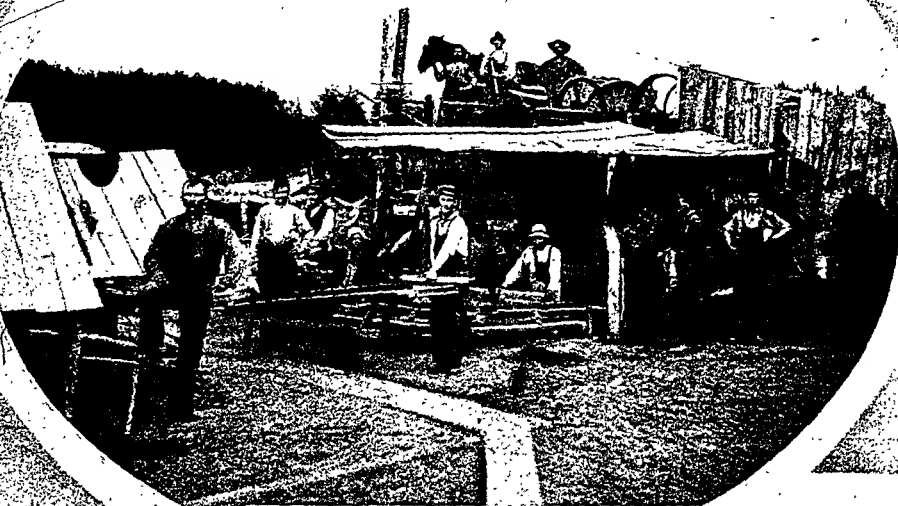
In 1912, 800 inspections were made of 225 factories employing 4,260 persons. Owners were notified of defective or imperfectly guarded machinery, unsatisfactory sanitary conditions, inadequate fire escapes, and the unlawful employment of women beyond certain hours, and children of tender years.

During the year there were some 16 accidents, none of them fatal.

The securing and distributing of harvest labourers is an important branch of the activities of the Bureau of Labour. Acting in co-operation with the railways some 16,000 harvesters were secured for Saskatchewan farmers, very many of whom will doubtless become permanent settlers.

It has been ascertained that there are 75 labour organisations at present in the province. These have a total of 5,500 members.





Three of Saskatchewan's Industries (1) Big River Lumber Company's Dam; (2) Brick Making;  
(3) Prince Albert Flour Mill

## LABOUR LAWS

THERE are four acts now in force looking to the security of employees and the protection of their wages. The Masters' and Servants' Act not only practically guarantees the wages of the employee, but also gives him a means of redress in case he is ill used or wrongfully dismissed. The Mechanics' Lien Act gives him a lien for his wages against any building on which he may have been employed, and also on the land on which the building is erected. The Workmen's Lien Act gives the employee a lien on the logs or timber of the lumbering company. The Thresher's Employees Act gives him a claim on the money earned by the threshing machine, which takes priority of every other claim.

All the industrial legislation of Saskatchewan is modelled with the intention of surrounding the worker with all possible safeguards and privileges, and The Factories Act is no exception to the rule. No child under fourteen years may be employed in a factory, no youth of less than sixteen, and no girl of less than 18 years old may be employed in any dangerous or unwholesome factory, and no females or youths may work more than eight hours a day or 45 hours a week.

Our Workmen's Compensation Act is a step in advance of acts of a similar nature in force in other parts of Canada. It secures the right to compensation from employers for injuries suffered through accidents, and the compensation is payable whether the injury is caused through negligence or not.

## OPPORTUNITIES

IT is not only for the agriculturist that Saskatchewan is a land of promise. All along our new lines of railways new towns and villages are springing up, and in all of them there are opportunities, not only for professional men such as doctors, lawyers, druggists, dentists or teachers, but also for all kinds of tradesmen such as tailors, harnessmakers, blacksmiths, carpenters and masons. These towns have only begun their usefulness, many of them being centres of thriving communities which have been clamouring for railway communication for years before the construction was completed.

Saskatchewan's lumbering industry is capable of great expansion, and although there are already some good mills, well equipped with modern machinery, there is plenty of room for more, as the output from the forests is increasing so rapidly.

Another great resource of the province is in the numerous beds of clay suitable for brickmaking or for the manufacture of pottery, tiles and drain pipes. There is no doubt that in time this will be found a rich field for the investment of capital.



Interior of a Flour Mill

The flour milling industry is one that has received a good deal of attention, as is natural in our hard wheat producing country, but there is no doubt that there are many opportunities for the establishment of additional mills.

There were 22 flour and feed mills in operation in the province during 1911, which had an output of \$3,596,934. Their 330 employees earned \$267,938.

All along the southern portion of the province there are many outcroppings of lignite coal which cannot now be profitably mined on account of lack of transportation facilities. A branch of the Canadian Pacific Railway is now being constructed across this coal-bearing area, and on its completion there is no doubt that there will be great activity in this region, and many profitable mines will be opened.

## POPULATION

ON June 1, 1911, the Fifth Census of the Dominion of Canada was taken, and on April 30, 1912, the first volume of the completed report was issued. This volume bears eloquent testimony to the wonderful progress which has been made, not only by the Dominion in general, but also by the province of Saskatchewan in particular. In the census taken both in 1891 and 1901 the population of the unorganised portions was estimated, but the census under consideration is an enumeration by person and name taken for the whole province by 604 enumerators, with 13 schedules and 549 questions.

We find the total population of Saskatchewan in 1906 was 257,763. In 1911 it was 492,432, an increase of 234,669, or 91.03 per cent. This increase is a good deal greater, both in numbers and percentage, than in any other province in the Dominion, our nearest competitor being the province of Alberta.

We now have 120,751 families as against 66,009 in 1906, an increase of 54,742. In 1911 there were 291,730 males and 200,702 females as against 152,791 males and 104,972 females in 1906. The increase of males was 90.93 and of females 91.19. So that the number of the sexes now bear about the same relation to one another as in 1906, or in other words have increased at almost the same rate.

The following table of population by conjugal condition shows the figures in 1911 and the increase during the five years.

		Single	Married	Widowers	Divorced	Legally Separated	Not Given	Total
MALES	1906	103,376	46,702	2,262	51			152,791
	1911	192,352	90,765	4,291	85	82	4,155	291,730
FEMALES	1906	59,559	42,173	3,205	35			104,972
	1911	112,387	82,189	5,556	34	55	481	200,702
MALES		88,976	44,063	2,029	34	82	4,155	138,939
FEMALES		528,28	40,016	2,351	1	55	481	.95,730
Increase								



The males exceeded the females by 47,819; and the ratio was as 1.45 to 1 in 1906; and in 1911 the males exceeded the females by 91,028, but the ratio of the sexes was maintained at 1.45 to 1.

The area of the province is now 251,700 square miles, and the number of people per square mile is 1.95. The following table showing the population per square mile in the different provinces is interesting:

Alberta	1.93
British Columbia	1.09
Manitoba	6.18
New Brunswick	12.61
Nova Scotia	22.98
Ontario	9.67
Prince Edward Island	42.91
Quebec	5.69
Saskatchewan	1.95
Yukon	.041
Northwest Territories	.009

The following shows the division of the population into Rural and Urban in 1906 and 1911. The province of Alberta and Manitoba are given for the sake of comparison.

PROVINCE	RURAL			URBAN		
	1906	1911	Increase	1906	1911	Increase
Saskatchewan	209,301	361,067	151,766	48,462	131,365	82,903
Alberta	127,379	232,726	105,347	58,033	141,937	83,904
Manitoba	227,598	255,249	27,651	138,090	200,365	62,275

Ratio of Rural and Urban population to total.

	1906		1911	
	Rural	Urban	Rural	Urban
Saskatchewan	69.77	30.23	73.32	26.68
Alberta	62.26	37.76	62.12	37.88
Manitoba	68.71	31.29	55.02	44.98

The following table illustrates the great progress made by our Urban population. Only those Cities or Towns with 1000 or more of population are shown.

CITIES	Population		Increase in Decade	
	1901	1911	Total	Per cent.
Moose Jaw .....	1,553	13,832	12,265	787.23
Prince Albert .....	1,785	6,254	4,469	250.36
Regina .....	2,249	30,213	27,964	1,243.40
Saskatoon .....	113	12,004	11,891	10,523.01
TOWNS				
Battleford .....	609	1,335	726	119.21
Estevan .....	181	1,981	1,800	994.48
Indian Head .....	768	1,285	517	67.32
Melville .....	...	1,816	1,816	.....
Moosemin .....	868	1,143	275	31.68
North Battleford .....	...	2,105	2,105	.....
Rosthern .....	415	1,172	757	182.41
St. Mary's .....	121	1,852	1,731	1,430.58
Weyburn .....	113	2,210	2,097	1,576.69
Yorkton .....	700	2,309	1,609	229.86

## LEGISLATION

FROM the earliest days of our history the legislation in our province has kept pace with the needs of our rapidly growing community, and a brief sketch of the progress we have made in this direction is of interest to the newcomer and to the older settler alike.

Immigration followed the lines of railway. Settlements grew into villages, and villages into towns and cities, so that the demand for suitable government soon asserted itself. This was met by proper legislation, and as these towns and villages increased in number and size they were gradually entrusted with greater powers, until now they have a measure of self-government equal to that of any country in the world.

Early in our history we find the germs of a judicature ordinance, and a Supreme Court for the Territories was organised. The civil law is based upon the common law of England, with such slight modifications as would naturally suggest themselves owing to the different conditions. The legislative problems presenting themselves to the notice of the administration of a new country, a nation as it were in its embryo stage, were such as would naturally arise from the conditions in which the people found themselves, and the acts and ordinances which followed were often the result of suggestions made by the people.

The registration of deeds, the form of indentures, the administration of justice, including the appointment of justices of the peace in and for the Territories, the protection of the property of married women, the exemption of certain property from seizure, mortgages, workmen's liens, and many other kindred matters were dealt with from time to time, including the regulation of the legal and medical professions. A board of education was organised, consisting of the Lieutenant Governor and four members.

- Under the old North-West Council a statute labour ordinance was enforced, in order to provide for local improvements, and under this ordinance the cost of these improvements could be paid for in labour instead of money. It had been the custom to vote an equal sum of money to each electoral district for public improvements, which sum was expended under the supervision of the individual member for the district. Later the various departments of the public service were organised, and through the Department of Public Works improvements were carried out where they were most needed.

One of the first matters dealt with by the North-West Assembly, which replaced the North-West Council in 1888, was the liquor traffic. At one time prohibition of the manufacture, importation and sale of intoxicants was in existence, and liquor was only procurable by permits issued by the Lieutenant Governor. This did not work well, and at last a licensing system was resorted to, and that system at present obtains.

Other subjects for domestic legislation included ordinances dealing with marriage, ferries, bridges, infectious diseases, prairie fires, noxious weeds, hotels and boarding houses, gambling, billiard licenses, fences, agricultural societies, the holding of agricultural exhibitions, stock associations, herding of cattle and grazing of sheep. A system of brands and their registration was formulated by the Department of Agriculture, agricultural societies were reorganised, and steps taken to improve the breeds of stock and the seeds of cereals.

The past has witnessed wonderful progress and development. Many measures of far reaching importance have been moulded into law, government machinery has been organised and perfected, and the foundations of provincial institutions have been laid.

During the first few years of the province's existence, a vast amount of necessary legislation was put through. A few of the more salient features of the legislation which has been enacted include the organisation of provincial courts, supreme, district and surrogate; registration of real property; municipal legislation for the creation of cities, towns, villages and rural municipalities; the establishment of high schools, collegiate institutes; the formation of public libraries; the creation of the University of Saskatchewan; free text books; the Supplementary Revenue Act; redistribution of provincial constituencies; election law; taxation of all corporations and railway companies; telephones; liquor traffic; public health; mechanics', woodsmen's and threshers' liens; seed grain and wolf bounty.

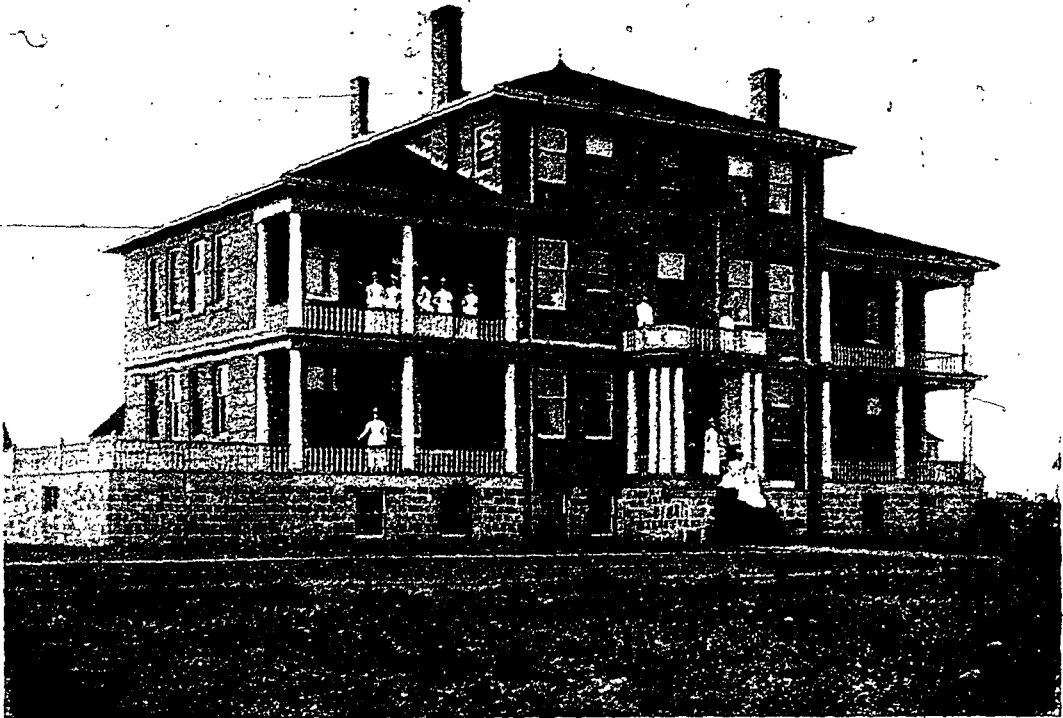
There are at present five supreme court judges and eight district court judges.

## MUNICIPAL DEVELOPMENT

THE record of Saskatchewan's municipal development is unique in the history of Canada. On September 1, 1905, there were 882 townships in Saskatchewan enjoying local organisation. Today

there are, in rural municipalities and local improvement districts, 2,528. In the same period the number of villages has grown from 63 to 225, and the number of towns from 16 to 63. While our cities have not been added to in numbers since 1906, the area of each has been very materially increased.

Our rural assessments are made exclusively on the land, so that no personal property, buildings or improvements are taxed. This system whereby the land is made to bear assessment is rapidly spreading to our towns and cities, and provision is made that in four years'



Typical District Hospital

time at the rate of 25 per cent. each year, any city or town may completely eliminate assessments on buildings and improvements, and place the whole taxation on the land values alone.

Of the 172 rural municipalities, twenty-two have been authorised to borrow money, and none of them have as yet been forced to raise their assessment on account of securing money to be repaid during the next fifteen or twenty years, on the debenture plan.

Our streams are not permitted to become polluted by any contamination from sewage. The provincial government insists on all sewage being purified to the extent of elimination of disease germs, where such effluents are near any body of water liable to be used for domestic water supply.

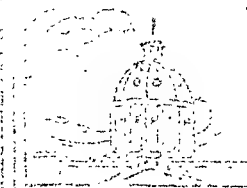
Systematic efforts are being made to carry the principles of town planning into effect.—Mr. Henry Vivian, ex M.P. for Birkenhead, England, who is a recognised authority, lectured throughout the west on this subject, and some of his proposals are now taking definite shape. One of the movements is for the municipal control of subdivisions and annexes so that they may be brought into conformity with the towns or cities which they adjoin.

## TAXATION

THE revenue of the province is almost entirely derived from Dominion subsidies, in lieu of lands, for population, and for other reasons as set out in its Autonomy terms. The province is in the fortunate position of being able to conduct its affairs without having to resort to direct taxation. The only tax collected by the provincial government is known as the supplementary revenue tax, and it is levied for educational purposes in order to provide assistance to new and struggling school districts in the rural areas. It averages 6.6 mills on the dollar in city school districts, 8 to 10 mills in town districts, and from 5 to 6 mills in rural districts, the rate varying according to the extent of rateable territory and type of schools erected.

The taxes for municipal purposes are low. The average assessment in rural municipalities is 5 cents, with a maximum of 6¼ cents per acre.

The rural municipalities generally comprise an area of nine townships, and they are allowed to borrow by debenture an amount limited to \$3,000 per township, the indebtedness being spread over a period of twenty years. This privilege is permitted in order to allow the municipalities to carry out permanent improvements.



The supplementary revenue tax was a step in the direction of equalising taxation by compelling all taxable lands to assist in carrying the load instead of leaving the whole burden upon the lands within organised rural school districts. The Corporation Tax Act, and the Act taxing the income of all railways are both distinct advances in the same direction. Action can be taken to enforce payment of local improvement and school taxes by nonresidents and by companies at the end of the first year of nonpayment instead of when taxes were in arrears two years. Nearly all the companies' land grants (except those owned by the Canadian Pacific railway under its twenty years' exemption clause) that have been patented, have been brought under taxation.

## OUR FOUR CITIES

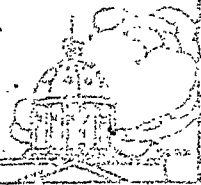
### REGINA

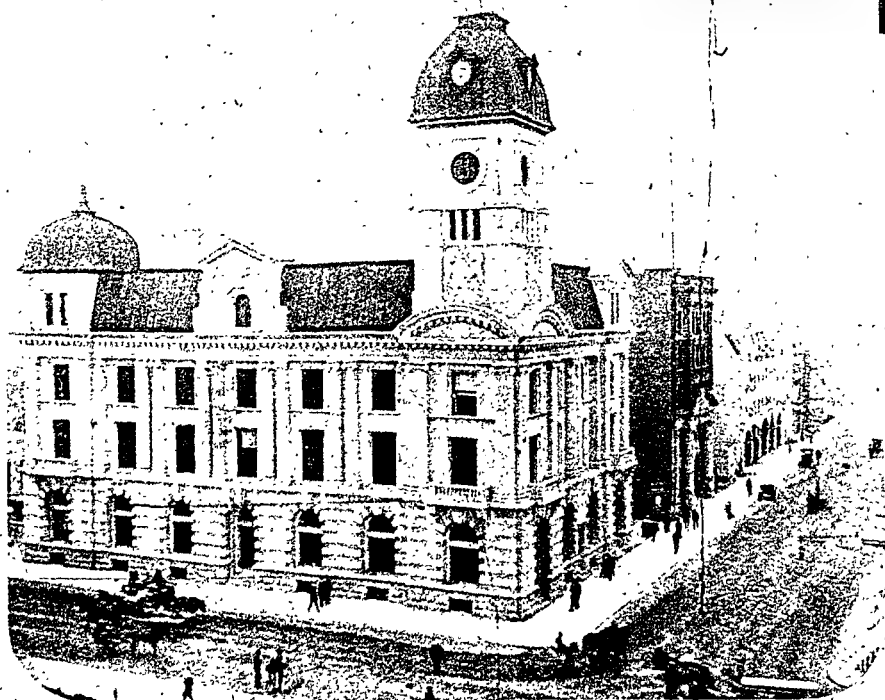
**R**EGINA, the capital of the province and the seat of Government, is situated 357 miles west of Winnipeg on the Canadian Pacific railway.

Owing to the fact that the city, which is in the centre of a splendid agricultural district, has railway facilities unrivalled in the province, it has become a great distributing centre, especially in agricultural implements and threshing machinery. Over twenty firms, representing the largest manufacturers in Canada, and many from the States, have their western headquarters here, and do an enormous business. Other lines represented are wholesale grocers, hardware, fruit, builders' supplies, commission and forwarding agents, school supplies, etc.

Factories are numerous and rapidly increasing. Among others there are brickyards, foundries, sash and door factories, soap factory, brewery, five printing houses, cigar and aerated water factories.

The city is thoroughly modern, owns and operates its electric light system and has many miles of paved streets and granolithic sidewalks. There is abundance of fine spring water brought in by gravitation. It has a Dominion Lands Office and Provincial Land Titles Office, and is the seat of the Supreme Court and executive offices. Government House is in the west part of the city and close by are the headquarters of the Royal North-West Mounted Police. The population is estimated to be 40,000 in 1912.





p. 70] Civic Progress. (1) A Park in Moose Jaw. (2) A Saskatoon Street. (3) The Regina Post Office.



## MOOSE JAW

**T**HE city of Moose Jaw is an important railway centre and divisional point 398 miles west of Winnipeg. The Canadian Pacific railway pay roll aggregates \$150,000 monthly. The city is surrounded by a grand agricultural country, celebrated for its high average yields and the good quality of its crops. It has a Dominion Lands Office and Provincial Land Titles Office, and also very extensive stockyards. There are ten banks and many churches and schools, including a collegiate institute which cost \$150,000.

## SASKATOON

**S**ASKATOON is located practically in the centre of the province and being a long way from any other large point commands a wholesale distributing territory of about 45,000 square miles, embracing nearly 200 towns and villages on operating railways. There are nine different railway outlets from the city. Saskatoon has water and sewerage system, electric light and power, and five newspapers. There are thirteen banks, five schools, a collegiate institute, two hospitals, and eleven hotels. There are fourteen places of worship. All the comforts and conveniences of the largest places are to be found in the city of Saskatoon.

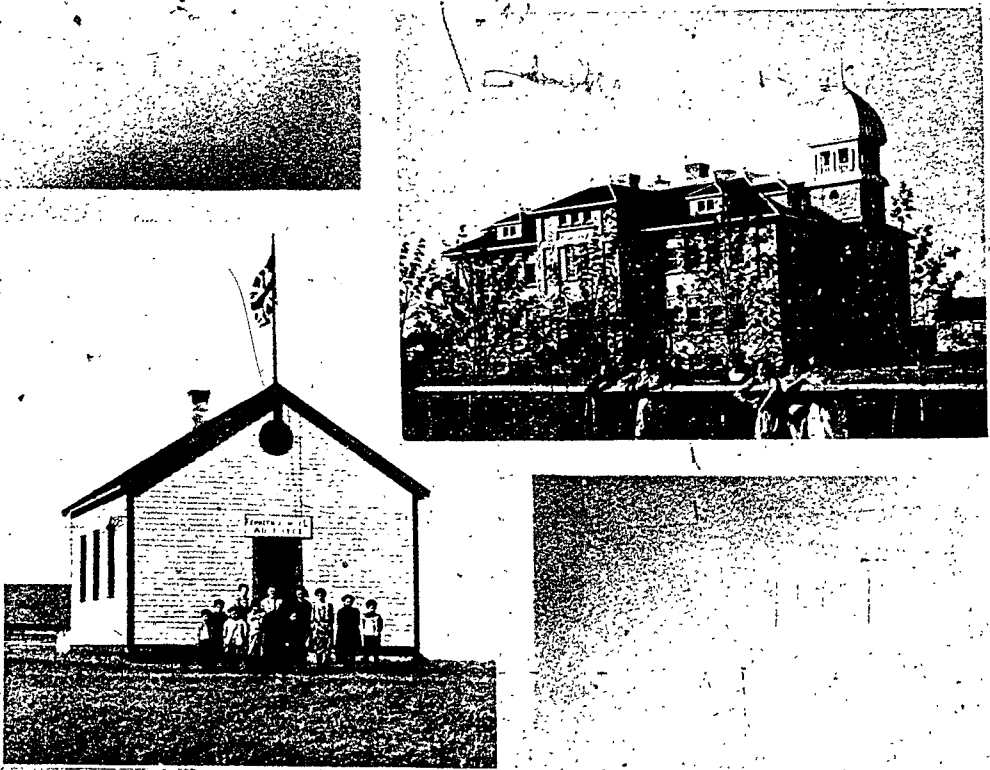
## PRINCE ALBERT

**P**RINCE ALBERT possesses a very picturesque site on the south bank of the North Saskatchewan river. It is the terminus of two branches of the Canadian Northern, and the Grand Trunk Pacific will shortly reach it. Prince Albert is the headquarters of the East Saskatchewan and Prince Albert Land District and of the judicial district. It is also the headquarters of the Anglican Diocese of Saskatchewan and the Roman Catholic Diocese of Prince Albert. The city has six banks, nine hotels, two hospitals, three newspapers and all modern improvements, such as paved streets, sidewalks, electric light, water, sewer, telephones, etc. Prince Albert is the centre of a large lumbering industry which employs five thousand men.

## THE EDUCATIONAL SYSTEM

**N**EWCOMERS to our province need have no fear that the educational requirements of their children will be overlooked. New school districts are being created at a very rapid rate, and during the year 1912 were created at the rate of eight per week.

The maximum size of the districts is 25 square miles, but the majority have an area of from 16 to 20 miles. There must be at



Typical Town and Country Schools

least four residents in a district who would be liable to assessment, and at least 12 children between 5 and 16 years of age. The schools are maintained by local rates and government aid.

The school work is divided into eight standards, of which the last three are mainly for preparing students for diplomas enabling them to take training at the normal school. After completing this normal school training, an interim certificate is given, which is made a professional teacher's certificate after one year's successful teaching.

Owing to the rapid increase in the number of schools, one of the greatest problems of the Department of Education is that of supplying the demand for teachers, and every effort is made to overcome the difficulty by a system of granting provisional certificates or permits to undergraduates of British or Canadian Universities, but still some schools have had to remain closed for lack of teachers.

In 1907 The Secondary Education Act was passed, and as a result a number of high schools and collegiate institutes have been established, and each year sees the addition of several others to the number.

Settlement and education have proceeded hand in hand, and for some years it has been Saskatchewan's proud boast that new school districts have been organised in this province at a greater rate than in any other part of Canada. This year all records have been broken.

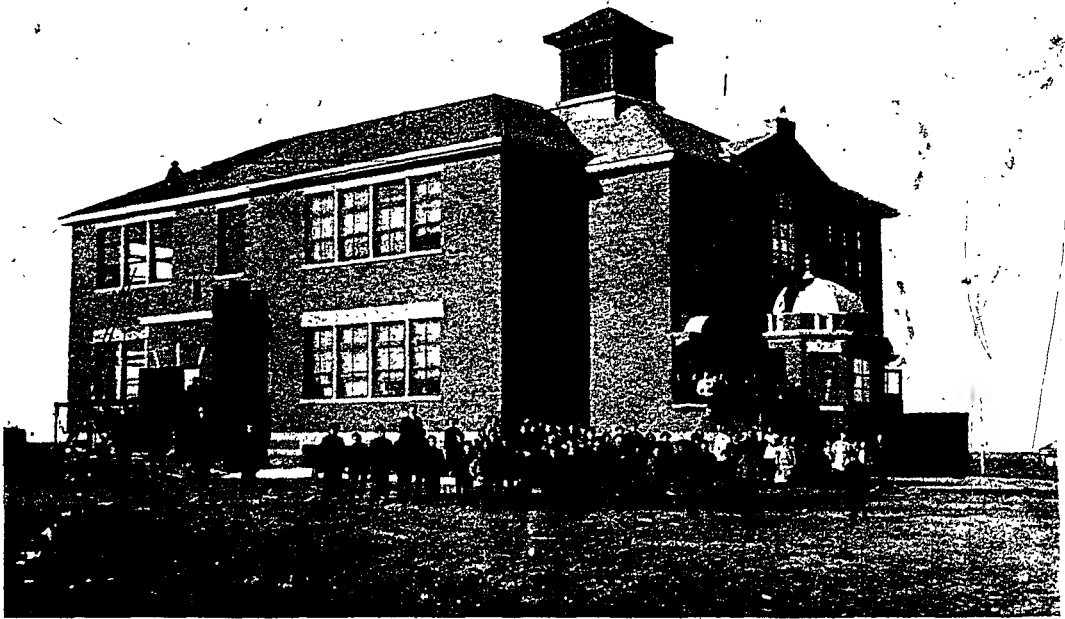
No one will deny for one moment, the importance of providing the children of Saskatchewan with good education. The government has fully realised its responsibility in this connection. That the efforts of the government have been attended with success is evidenced by the splendid schools which have been erected in our towns, villages and rural districts, and by the fact that in no new country has such gratifying progress in respect to education been made in so short a space of time. During the past six years 1,623 new districts have been established, including two collegiate institutes and fifteen high schools.

The collegiate institutes are at Regina and Moose Jaw, and the high schools are located in these cities and also at:

Moosomin	Qu'Appelle	Arcola
Prince Albert	Saskatoon	Oxbow
Weyburn	Carlyle	Yorkton
North Battleford	Estevan	Battleford
	Indian Head	

In the case of schools open throughout the year six weeks' holidays are given and the school year is divided into two terms ending June

30 and December 31. The greatest demand for teachers takes place in the months of March, April and May; when the "short term" schools are opening. These schools are generally kept in operation from six to ten months, with a vacation period of two weeks.

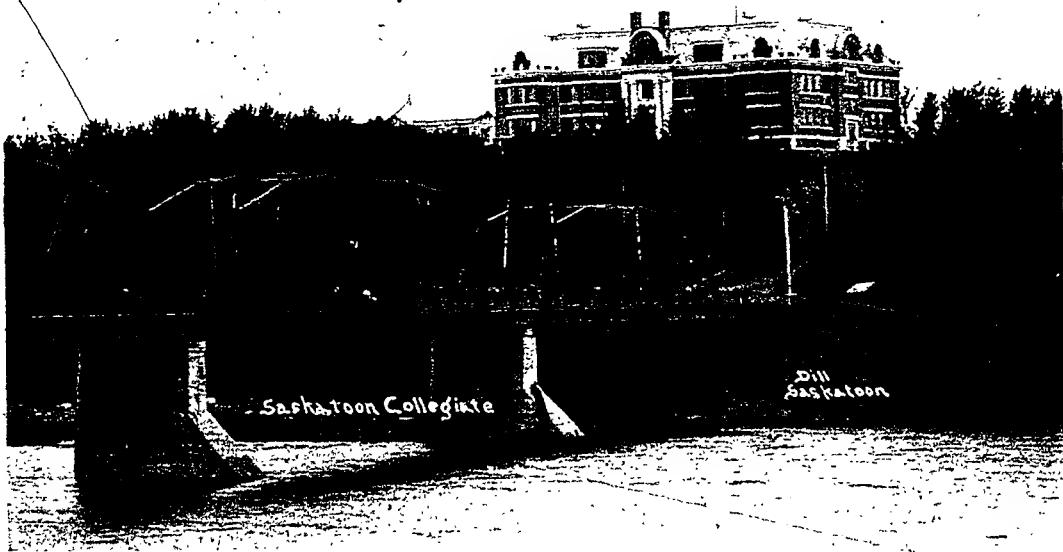


The Young Idea

The salaries of teachers are from \$50 to \$65 per month for the junior departments and from \$60 to \$125 per month for the senior departments. The average cost of board in rural districts is about \$16 per month, and in towns and cities about \$30.

## AGRICULTURAL EDUCATION

**E**ARLY in the history of the Territories, it was recognised that encouragement should be given to the sons of our farmers, to educate themselves in the various branches of agriculture in a thoroughly practical and scientific manner. The department in the past offered scholarships for competition among students from Saskatchewan attending the Ontario Agricultural College at Guelph, or



Saskatoon Collegiate Institute

—the Manitoba Agricultural College at Winnipeg. Scholarships were provided varying in value from \$50 to \$200, according to the specified conditions. Liberal scholarships were also offered for competition

among farmers' daughters of Saskatchewan taking courses in domestic science in Canadian agricultural colleges. In 1910 some 60 young men and women competed for these scholarships, and \$3,000 was paid out.

The first record of assistance to agricultural societies was in 1884, when \$1,000 each was granted to nine electoral districts, a portion of which was allotted to the encouragement of agricultural societies. In those days a certain amount was granted to each district for roads and bridges, and if the member had a balance he was permitted to use it in assisting the local agricultural society.

In 1887 the government granted \$1 for each \$1 raised locally. The societies also received grants from the Dominion government. The policy of giving grants to the agricultural societies is still adhered to by the Provincial government, and last year the sum of \$37,000 was paid out on this account. Under the guidance of the government these societies are doing valuable work in raising the standard of the province's staple industry. The government expended \$370,000 in 1911 in fostering and aiding agriculture and stock raising in their various forms.

In the year 1909 the University of Saskatchewan was located at Saskatoon, and in the same year the College of Agriculture in connection was organised. In the year 1910 the educational work of the Department of Agriculture was transferred to the University. The chief aim of the college is to give its students a practical training in all the various branches of agriculture, and also to give them such an education in other ways as to make them good citizens of our province. The college with its staff investigates all questions pertaining to soils, crops, live stock, dairying and other agricultural matters; and issues the information thus gained to farmers' societies and associations all over the province. By means of the lecturers in its extension department valuable information is carried to the farmers, thus giving those even in the most remote districts a chance to learn of the work that is being done at the University. In order that the students may learn the best ways of handling live stock, fine horses, cattle, sheep, swine and poultry are kept. The farm mechanics building is well equipped so that the students may familiarise themselves with the latest types of implements, including gasoline and steam engines, the farm being large enough to permit of the use of these tractors.

The extension department provides judges for stallion shows, ploughing matches, good farming and standing grain competitions, and for the agricultural exhibitions, giving lectures and information on all kinds of agricultural problems. In short, this department endeavours in every possible way to convey to the farmers of Saskatchewan the best of information regarding the agricultural practices found by experience to be best suited to the conditions now prevailing in the province.

### CHARTERED BANKS IN SASKATCHEWAN

**B**RANCHES of the chartered banks of Canada have increased in number in Saskatchewan from 59 in 1905 to 372 in 1912. It is in Saskatchewan that the greatest expansion has taken place, Saskatchewan contributing 60 to the total of the new branches for the year 1911. These branch banks have proved very satisfactory, showing actual profits equal to those institutions which confined their efforts solely to the large commercial centres. The farmer as a borrower now ranks very much higher than he did a decade ago. His products find a readier market at a higher price and upon this basis he has built up a credit which is more acceptable to the bank than in days when railroad facilities were poor and the price of farm products was a very uncertain quantity. The western provinces have now more than half as many more branches than the eastern provinces.

Great Britain is providing more capital to Canada than to any other country with the exception of the United States and the rate at which the British people are now increasing their investments in this country is so rapid as to be phenomenal. It is coming in at the rate of about \$200,000,000 per year and the greater part of this vast amount is going to the development of the wonderful resources of this great western country.

In Saskatchewan during 1910 the loans of the regular mortgage companies increased 40.8 per cent. The investments of loan companies in this province in the same year amounted to \$23,222,112, while the trust companies' investments amounted to \$3,818,801.

### EMERGENCY CURRENCY

In order to handle the big western crop The Bank Act was amended in 1907 permitting banks during the months of September, October, November and December, every year to issue notes, in addition to the existing right, equal to 15 per cent. of the combined capital and

reserve. The existence of this emergency currency is somewhat of a safety valve, and it is to the interest of the bankers to facilitate the handling of the harvest products.

In October, 1911, twenty of the twenty-eight banks doing business were compelled to issue excess currency. This compares with sixteen in October, 1910, and not only has there been this increase in the number of banks using excess currency, but there has been a great increase in the amount which the individual banks issued.

Five years ago it was thought by many that our western cities had reached the stage when the subsequent growth would be normal and natural. Today they are growing faster than ever, and the explanation is fairly simple. So long as new settlers pour into the four western provinces, so long will it be possible for the British investor to buy land and sell it at a good profit to the newcomer, who can produce cereals from these new lands, or build upon them, which amply pays him for his investment.

The figures of the Department of Customs giving the amount of goods entered at and exported from each province show a greater increase for the province of Saskatchewan than for any other province in the Dominion. In the amounts paid for customs duties, the greatest rate of increase for 1911 over 1910 was also in this province, these two facts illustrating the enormous increase in Saskatchewan's volume of trade.

The reasons which caused immigration to Canada to set in at the beginning of the past decade and to steadily increase each year, will doubtless continue to be reflected in a growing movement of new settlers, and as long as the annual increase in population represents so large a ratio to the existing population as it now does nothing can happen in the near future, short of a world wide disturbance of credit, to cause any prolonged check to the prosperity the country is now enjoying.

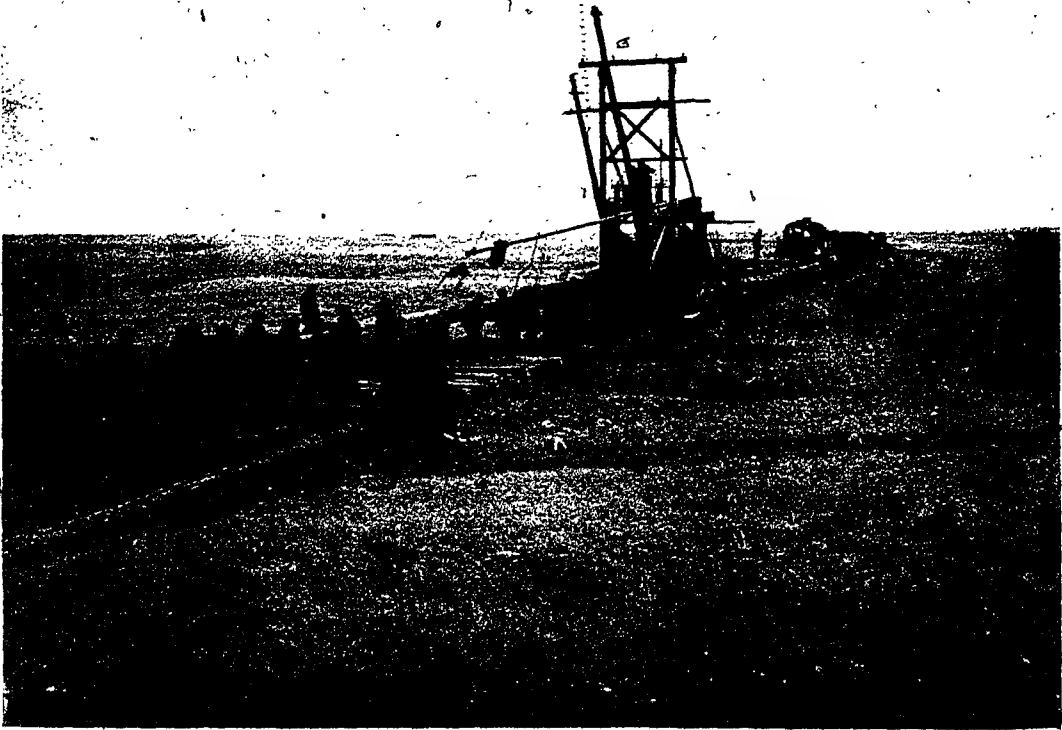
The different flotations of the municipal bonds of our cities meet with a ready sale in the markets in England. The ample nature of the security, and the great care with which the finances of our cities are administered, make this class of investment "gilt-edged," so that there has never yet been any difficulty in floating our debentures at good prices.

The city of Regina is becoming widely known as a financial centre. A very large part of the bond business of the province is done from Regina, and local firms are purchasing an annually increasing amount of bonds and debentures.



## RAILWAYS

**T**HE railway development of Saskatchewan is progressing at a most astonishing rate, and has attracted the attention and admiration of the whole world. No other country has ever shown such a rapidity of increase in railway mileage as has the Dominion of Canada, and for some years the province of Saskatchewan has been the leading province in this regard.



The Track Laying Machine

Few realise the great contest for territory which is being carried on by the three great transcontinental railways operating at the present time in the province. Taking Regina, the commercial capital, as a centre, new lines of railway are being pushed far into the unsettled

districts, and radiate in all directions in the older settled communities. The extraordinary rate at which construction has been progressing during past years may be judged from the fact that in 1910 there were only 500 miles of new lines constructed in the whole of the United States, while in Saskatchewan alone the new mileage was 475. In 1911 there were about 1,000 miles of new construction, and it is confidently expected that in future even this marvellous increase will be far surpassed.

The coming of the railways means that thousands of settlers will be brought into comparatively close touch with civilisation, and many hardships of life in the new districts will be relieved. The progress of our province, which has been so great in the past, must thereby be greatly accelerated. Saskatchewan is already known as the most rapidly growing section of the world.

In 1905 Saskatchewan had one mile of railway for every 161 inhabitants, and in 1911 one mile for every 109 citizens. Our population has not quite doubled itself, while our railway mileage has nearly trebled itself during this time. At the end of 1911 our railway mileage was 4,470 miles. The increased amount of mileage in 1911 over 1910 totalled no less than 736 miles.

It may be taken for granted that there is the keenest desire on the part of all three railway companies to extend their branches to outlying settlements as rapidly as possible. As a result of the policy of the government there is great competition between the railway companies to cover the field requiring railway facilities as soon as possible.

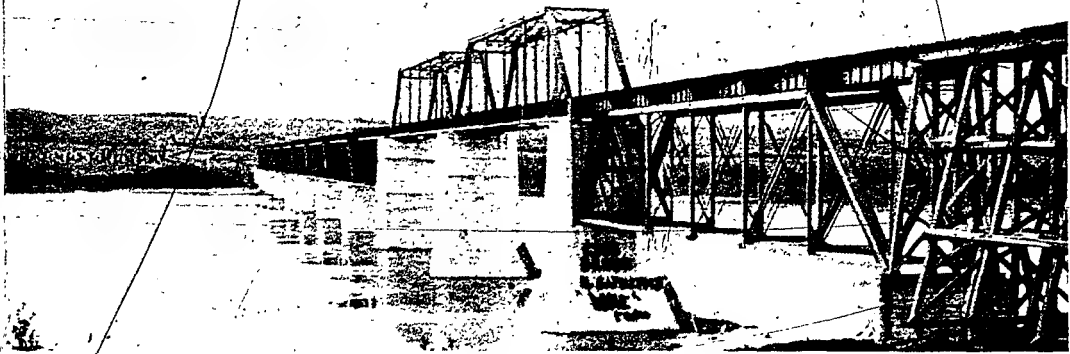
The construction season is often broken, and work much delayed, by rainy weather, and labour is at all times scarce and difficult to secure. This scarcity is accentuated when harvest time comes, and men leave the construction camps by hundreds for the pleasanter work in the fields.

Another grave difficulty confronting the railway builders is that the manufacturers are unable to meet the enormous and increasing demands upon them for rails and other materials. Delays in the completion of lines are often caused by this difficulty in securing materials. Everything possible is being done to obviate these obstacles, which should be borne in mind when considering the question of railway extension in the province.

Almost all the lines guaranteed in 1908 and 1909 have either been finished or are now in hand so that both the Canadian Northern and

Grand Trunk Pacific will soon be able to undertake still further construction. As the Canadian Pacific has also an extensive mileage of new lines in view, the general prospect for rapid railway extensions in all parts of the province is very bright.

The great increase in transportation facilities which has taken place in late years is to a great extent responsible for the striking development of the province at large.



Canadian Northern Railway Bridge at North Battleford—A magnificent structure

### THE RAILWAY POLICY OF THE GOVERNMENT

**I**N former years the Dominion government encouraged railway construction by giving large cash subsidies, and also by grants of public lands. This policy was imitated by many of the provinces, who have largely drawn upon their wealth in order to secure increased railway facilities. Saskatchewan, however, has adopted the wiser policy of making bond guarantees thereby securing the same end without drawing on the public purse.

In 1908 legislation was enacted which authorised the government to guarantee bonds of the Canadian Northern and Grand Trunk Pacific railways to the amount of \$13,000 per mile. In return for these guarantees the province secures the construction of desired lines along approved routes, and has a first mortgage on these branches, their equipment, tolls and so forth, and the companies concerned covenant to pay interest and principal of the bonds guaranteed. The province not only has a first mortgage on the branch constructed



but also has as additional security the entire system of the companies. The province is absolutely secured against possible loss.

Briefly, in guaranteeing bonds for construction of a line the provincial credit is pledged to make good any default in payment of interest or principal, and in return Saskatchewan has the security mentioned above.

Since the inauguration of this policy, the yearly rate of railway extension in the province has been five times as great as the rate during the preceding twenty-five years.

## ROADS AND BRIDGES

THE prosperity and future development of the province depend in a very great degree on the construction of good roads and highways to the market towns. The government has taken a firm grasp of this problem, being convinced that however great the cost may be the province can better afford to spend millions on good roads than it can afford to put up with bad roads and their inevitable costliness and loss to the people, both directly and indirectly. The government has set aside the sum of \$5,000,000 to be spent in highway construction, and very perfect methods of construction have been adopted, which are the results of the accumulated experience of other provinces and also of the western States, where road building is confronted with much the same obstacles as we have ourselves to overcome. In addition to the road building programme annually carried out by the government, there are grants made to the different rural municipalities, and in this direct manner the sum of \$120,000 was paid out during 1911. This amount will be largely increased in 1912.

A few years ago a definite standard for bridge construction was adopted, under which the smallest of them are designed to carry a 20 ton threshing engine and outfit. We have some very fine steel traffic bridges, the one at Battleford over the North Saskatchewan being the largest. There are also very large bridges at Prince Albert and at Saskatoon, and all over the province the number of steel bridges of the most modern construction is increasing very rapidly.

## TELEPHONES

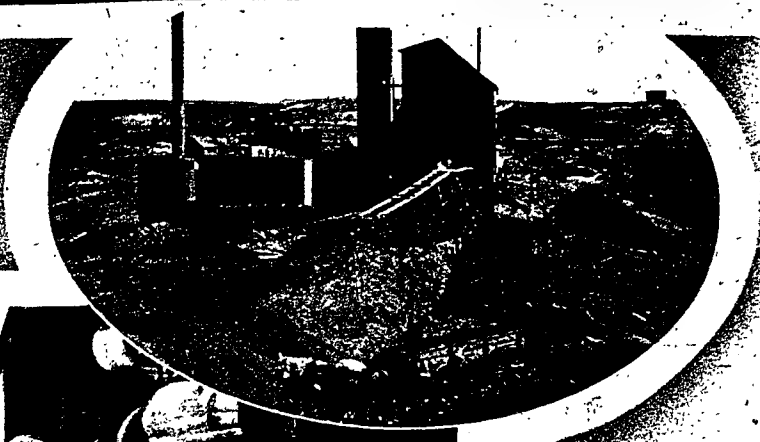
ONE great proof of progress is observable in the very rapid increase in the number of rural telephone companies, which has taken place within the last few years. On March 1, 1909, there were 31 companies, with 954 subscribers; and on Nov. 30, 1912, there were 337 companies, with 8,024 subscribers. The organisation of these companies is actively stimulated by the government, which supplies gratis all the poles necessary for construction of their lines. Each month sees several new companies incorporated, and thus this very important and valuable means of communication is rapidly being placed at the disposal of more and more of our farmers. In this country of magnificent distances, the value of the telephone can hardly be overestimated, and while the cost is little compared with its value, every farm ought to be equipped. But the development has been very rapid, although the good work has, but just begun.

Great progress has also been made in the extension of long distance lines. In the year 1908 the government purchased the whole of the plant of the Bell Telephone Company within the boundaries of the province, and this system has since been operated by the government. At the time of the purchase the system comprised 234 pole miles, and 876.5 wire miles, and this has been added to and extended to at a very rapid rate each year, until at the close of 1912, there were 3,167 pole miles and 11,037 wire miles.

## BRICK CLAYS

THE main clay working industry in Saskatchewan at the present time is the manufacture of common brick. Dry pressed brick are made in small quantities at a number of points in the western provinces, but there are no large plants in Saskatchewan. By far the greater part of the pressed brick now used in the west are imported, and command high prices. This is also true of fireproofing, terra cotta, firebrick, pottery and sewer pipe. It will be seen, therefore, that there is room for abundant development and expansion in our home clay working industries.

Beds of clays and shales suitable for the manufacture of clay products occur at very many places throughout the province, but the two principal areas are in the Dirt Hills, lying south and east of Moose Jaw, and along the Souris river valley.



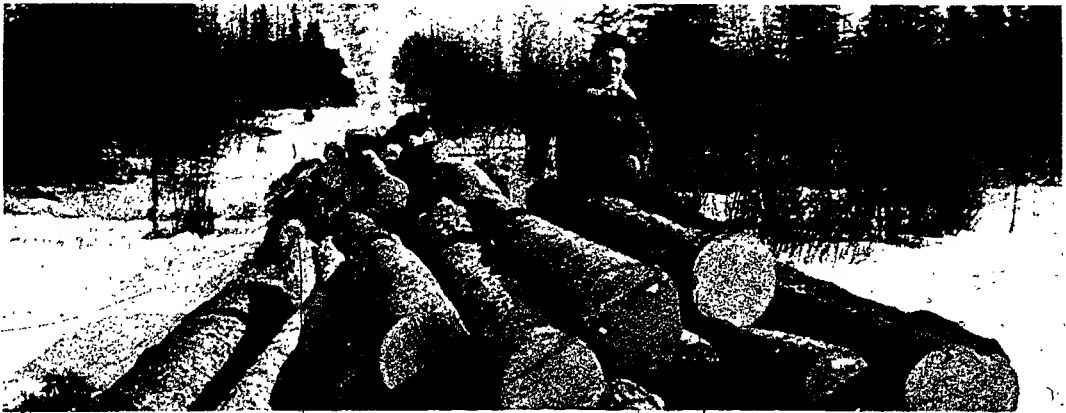
[p. 84]

Clay Working

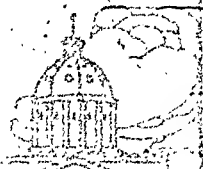
The escarpment of the Dirt Hills forms a conspicuous feature in the topography of southern Saskatchewan, and may be seen both from the Portal branch and from the main line of the Canadian Pacific railway, west of Moose Jaw. About twenty-three miles south of Drinkwater, there are exposed a series of white and brown clays in the outer slopes of the Dirt Hills. The beds composing these hills consist of clays, sandstone, and shales with thin lignite seams, and in some places the clays are of higher grade than any so far found in western Canada. These are fire clays, 30 feet thick in places, and are underlain by grey sandy clays, which will make good red wire cut or dry pressed bricks. The predominant beds are white and greyish white sandy clays, and brownish red clay shales. The white clay beds, which form the larger part of these hills, are quite prominent, and contain occasional lenses of a finer grained white clay. The development of these clays has been delayed pending the solution of the transportation problem, but now that the new branch of the Canadian Northern railway leading south-easterly from Moose Jaw passes through this region, it is probable that there will be a great expansion of the industry in the near future.

The pressed bricks, so many of which are imported from North Dakota, are made from materials almost precisely similar to those found in the Dirt Hills.

An extensive area of clays and shales is found in the Souris river valley, and these clays are being worked in connection with the lignite seams near Estevan. The top clay, overlying the lignite is



Hauling Logs by Tractor



highly calcareous and cream burning, and from it good wire cut buff bricks are made. Underlying the lignite there is a thick bed of clay shale, from which is made a good red dry press brick. Both the clays and the lignite are worked by open cuts, the latter being used under a forced draught for firing the kilns. There is a great abundance of clays in this district, mostly easy to mine. There is plenty of fuel and the market is accessible. Many other clay wares than are now being made at Estevan could easily be made in this district.

With these two principal areas, and many similar deposits in other parts of the province, there can be no doubt that this is a wide and profitable field for the investment of capital. The big markets and the high prices are here for expert men who will produce the proper clay wares.

There are at the present time only fifteen plants in the province engaged in the manufacture of brick and tile. These are capitalised at \$460,769, and in 1912 had a total output valued at \$208,000.



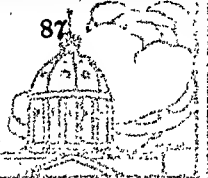


## LUMBERING

IT must not be taken for granted that the only source of Saskatchewan's wealth lies in her agricultural lands. Another very valuable resource is in her forests. This belt lies to the north and west of the city of Prince Albert, and of the timber in this area the most useful for commercial purposes is the white spruce. There is also the black spruce, tamarack, jack pine, two kinds of poplar and the white birch. The white spruce though usually smaller, sometimes runs thirty inches in diameter. The jack pine, found on the lighter sandy soils, is chiefly used for ties, of which hundreds of thousands are annually supplied to the railway companies.



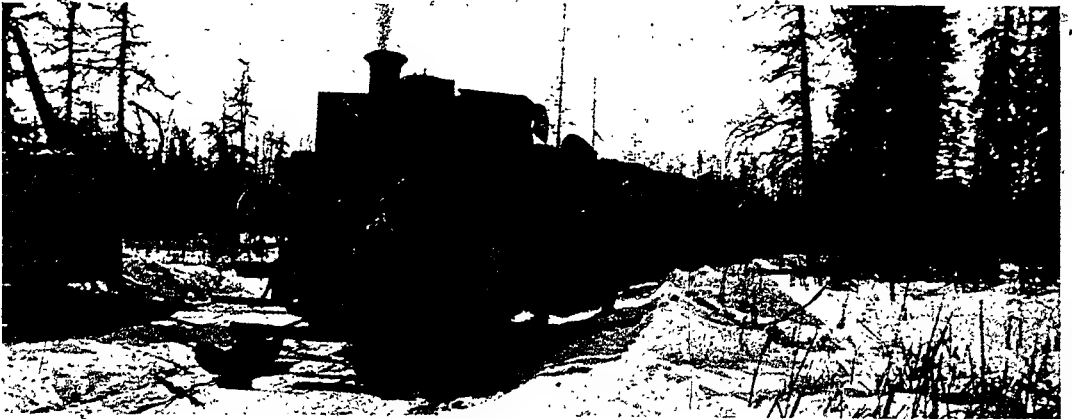
Ready for the Sawmill



There are fifteen large-saw mills. Owing to the rapid development of the province during late years, and the consequent increased demand for lumber, these mills have to enlarge their capacity from time to time, although one of them has already a capacity of six million feet per month. At present most of the lumber used in building in this province is brought from British Columbia, and it is an ordinary thing for the amount of the freight charges to exceed the value of the lumber. So that the advantageous position of the Saskatchewan mills compared with their British Columbia competitors can be easily seen, in view of the fact that their market is close at hand for all that they can produce.

The forest belt extends for very many miles north of the Saskatchewan river, and, with proper care and fireguarding, should supply an enormous amount of lumber for many years to come.

The lumber mills did a good season's business in 1912, and employed 8,619 men, who received three million dollars in wages and salaries. The total product of the mills during the year was \$7,512,000. There are also 28 additional sash and door factories, employing 1,000 men, who produced a total of about \$2,000,000 worth of finished material.



The Locomotive on Ice

## MINERALS

IT has been ascertained by geologists and explorers that the rock formations in the far north of the province are similar to those that occur in the northern parts of Ontario, and therefore it may be assumed that similar discoveries of minerals are likely to be made in our province. Even now samples of ores have been brought from a district about 200 miles north of Prince Albert, showing the presence of copper, silver and gold.

There are valuable deposits of pigments near Duck Lake. Good samples of ochres have been discovered at Cold Lake and also at Howell.

But coal mining has attained the greatest development of all our mining industries, and the importance of our deposits are well recognised. A government commission has lately been appointed to make thorough investigation not only into the value and extent of our coal bearing fields, but also into the best means of rendering this most valuable resource commercially available. They will inquire whether it will be better to erect a large plant at the mines for the generation of electricity to be conveyed to the power using centres, or whether it will be more advantageous to ship the coal as it is, or manufactured into briquettes.

## THE COAL FORMATIONS OF SASKATCHEWAN

IT has been said that the extension of railways through fertile lands will not of itself bring permanent settlement, because reasonably cheap fuel is also a *sine qua non*. Thus the treeless area of south-western Saskatchewan is now being crossed by railways, but permanent settlement cannot ensue until these railways, which are being constructed mainly from the east, cross the coal bearing formations. In our province the southern coal fields are traversed by the "Soo" branch of the Canadian Pacific railway, and also by a branch eastward from Estevan into Manitoba.

Mr. Dowling, in his report to the Dominion Geological Survey Branch, has laid down a section line through the coal formation from Fernie in British Columbia, across Alberta, entering Saskatchewan in the Cypress Hills. The line, with a slight curve to the south, passes through coal bearing rocks almost all the way to Glen Ewen in the south-easterly corner of the province.

Beginning at the west boundary, we have the Cypress Hills capped with Miocene rocks of the Tertiary age, below is the Laramie formation, then the Cretaceous floor, then the Laramie rocks of the Belly river formation, then a deep band of Cretaceous, followed lastly by the Kootenie formation.

The most easterly Miocene rocks are found in townships 6 and 7, ranges 18 and 19, west of the third meridian.

The Laramie is found intermittently from the fourth meridian easterly until longitude 106, the principal areas lying to the south of the section line in the Wood Mountain country. Eastward again this formation is continuous until it runs south across the International Boundary line in township 1, range 33 west of the principal meridian.

The Cretaceous next in depth is found the whole way across the province from east to west.

The Belly river coal formation is also continuous from boundary to boundary, but thins rapidly towards the east.

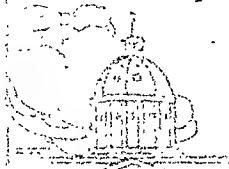
The lower Cretaceous floor also crosses the province.

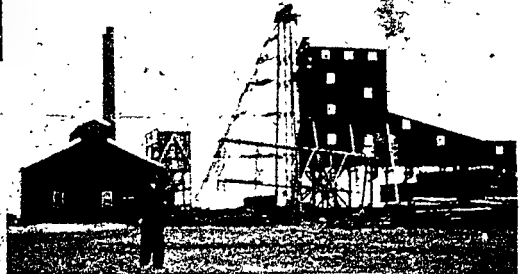
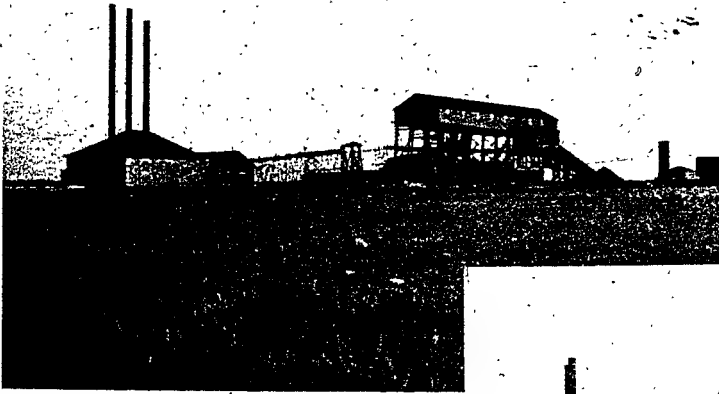
The Kootenie formation extends but a little way east from the fourth meridian, and its resources are still to a great extent problematical, as there are no mines and no outcrop of this formation.

Going north along the fourth meridian, the rocks of the Belly river formation are encountered a little south of the village of Walsh on the main line of the Canadian Pacific railway. The eastern boundary of the coal formation crosses the South Saskatchewan at Saskatchewan Landing, thence north-easterly to township 35, range 11, west of the third meridian. Here the line turns north and west, until in township 41 it crosses the fourth meridian into Alberta.

The Laramie rocks reappear north of the South Saskatchewan in ranges 12 to 9, west of the third.

The above shows roughly the extent of the coal formations in our province, and it covers an area of about 4,000 square miles. The most important portion of this area is that lying in the Souris district, for the simple reason that the Laramie is nearer the surface, and therefore is more accessible, and also because the Belly river formation lying between the North and South Saskatchewan rivers is of problematical value. There are no producing mines in that part of the country. So that any discussion of our coal fields must be at present confined to the deposits in the south and south-east,





Some Coal Mines and Miners

known as the Souris river coal field. Outside of this district, there is but one operating mine, that of the Edmanson Coal Company at Swift Current.

Coal was first discovered by Sir James Hector in the year 1857 at the Souris river near Roche Percee. Dr. Selwyn made a descent of the Saskatchewan river in 1873, and presented the first report on coal by a Dominion Government officer. Dr. R. Bell also reported on the coal of the Dirt-Hills in this year. Dr. Dawson, the naturalist of the International Boundary Commission, analysed the Roche Percee coal.

In 1880 the first coal was shipped on barges down the Souris river, but the venture was not a success.

Dr. Dawson, R. G. McConnell and J. B. Tyrrell are the men to whom we are indebted for the detailed examinations of our coal bearing areas, which enable us to arrive at their true structure and distribution.

There are, then, three distinct coal horizons, the lowest named by Dawson the Kootenie, which is of either Jurassic or early Cretaceous age. The line of demarcation is not well defined. The second horizon is named the Belly river (or Judith river) formation. In this formation there are very few workable seams, but its area is so large as to make it important. The third horizon is that of the Laramie.

Below is Dowling's estimate of the coal content

	Square Miles	Million Tons	
Laramie .....	4,000	15,000	Lignite
Belly River.....	1,500	3,000	Lignite

In Saskatchewan only lignites have hitherto been found, and of the 15,000 million tons in the Laramie formation, the coal in the Souris area is estimated to contain 2,000 million tons.

The ease with which this coal in the Souris district can be shipped both north and east, together with the increase in population, has raised the production of coal from about 40,000 tons in 1901 to 204,000 tons in the year ending March 1, 1911.

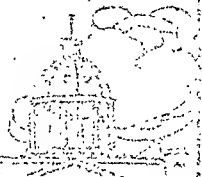
The character of our coal varies with the age of the formation and the amount of the covering beds. In the Laramie and Belly river formations they are all lignites, grading from nearly true coals on the west to poor lignites with 20 per cent. of moisture in the undis-

turbed regions. The exposures in the Kootenie formation are all in the broken disturbed blocks of the mountain area, and range from coking coals to anthracites.

The continuation of the coal beds eastwards under the rocks of the plains has not been determined, but it is possible that the drift coal found near Prince Albert may be an evidence of this continuation. It is clear that the Laramie rocks have been worn away from the plains, and that what is left is only the lower portion of the stratum.

The best known portion of the coal fields is near Estevan. Seams up to 15 feet in thickness are being mined, some of which outcrop on the river bank and others are found by boring. Over a large part of eight townships there are 7 million tons of lignite available per section. Coal has been found north nearly to Weyburn, and outcrops on the Souris in township 3, range 15. Seams are exposed on Big Muddy creek, and at the crossing of Poplar river, township 1, range 29, west of the second meridian, there is a seam of 18 feet about the same quality as the Souris coal. At Wood Mountain and also in the Willow Bunch settlement good coal is taken out for domestic use. West of this the lignite beds underlie parts of the Swift Current plateau. So that there is a very large area, exclusive of the Souris river district, where there is a chance of finding valuable coal.

Beginning at the face of the Coteau du Missouri, there is a wide plain, drained to the north-west from the Yellow Grass marsh by the Moose Jaw creek, and to the south-east by the Souris river and its main branch, Long creek. The Souris river has cut a short and narrow valley just above its junction with Long creek at Estevan. The channel from the plain into the valley has shifted, owing to the level nature of the surface, and has cut numerous lateral, parallel valleys north of and above Roche Percee. The coal seams are exposed in very many places, and in this district have been separated into three horizons. Workable seams occur in all of them. Dr. Dawson's analyses of these coals prove that as a rule the lower seams or those with the greatest thickness of strata above them are the most valuable. Many sections of the beds have been taken, and the elevation above tide of the lower horizon varies from 1,729 feet upwards. This is in the north-west corner of section 28, below the Pure Lignite mine, which is on the upper seam, on the south side of the river.



At the Taylorton mine in section 31, township 1, range 6, the seam mined is five feet in thickness, and east of this there is a group of mines where the seam thickens to eight feet, and appears to be a combination and continuation of the lower seam as far as section 35. East of this it has not been found.

The coals of the middle and upper horizons of this district are not of so high a quality as those of the lowest seam, except only in those places where the surface deposits are very deep.

It is a very difficult problem to give a comparative arrangement showing the increasing or decreasing values in heating properties of these coals. If the calorific value alone is taken, then all these bituminous coals should rank first, even above the anthracites. But as the lignites of the district contain a high percentage of moisture, and are also friable, their value is greatly diminished in an economic sense. As they are air dried they are liable to crumble, and they do not stand handling and shipping as well as the true coals and anthracites.

The classification recommended and used by Mr. Dowling is termed the "split volatile ratio." The formula is as follows:

$$\frac{\text{Fixed carbon} + \frac{1}{2} \text{ volatile combustible.}}{\text{Moisture} + \frac{1}{2} \text{ volatile combustible.}}$$

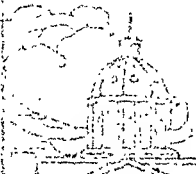
$$\text{Moisture} + \frac{1}{2} \text{ volatile combustible.}$$

The resultant numerical value for this ratio, if applied to the following scale, gives the class to which the coal belongs:

Anthracite.....	15 up
Semi-anthracite.....	13 to 15
Anthracitic coal.....	10 to 13
High carbon bituminous.....	6 to 10
Bituminous.....	3.5 to 6
Low carbon bituminous.....	3 to 3.5
Lignitic coal.....	2.5 to 3
Lignite.....	1.0 to 2.5

A few extracts are given of the values of coal at some of the points in the Saskatchewan coal fields, showing the results of the application of this mode of classification:

Prince Albert, drift coal.....	2.32
Souris river, tp. 3, rge. 15 west 2nd.....	2.15





South Saskatchewan, near Medicine Hat . . . . .	a 4 foot seam.
Wood Mountain, near 3rd meridian . . . . .	1.80
Long creek, sec. 22, tp. 1, rge. 8 west 2nd . . . . .	1.77
Souris river, near mouth of Long creek . . . . .	1.70
Souris river, a mile west of Short creek . . . . .	1.76
Big Muddy creek . . . . .	1.31

There can be no doubt that the great value of these coals to the province is hardly capable of exaggeration. They are excellent as gas producers, and for any kind of steam plants have proved their value. As the railway construction progresses through the country adjacent to the International Boundary, the production of coal will increase at a still more rapid rate than it has in the past, and many towns and villages of the future will get their fuel from the Souris coal fields, at all events until the haul from the southern Alberta coal mines is shorter than from the east. Modern screening plants and coal cutting machinery are about to be installed, and the rate of production in the year 1912 is certain to eclipse that of former years. The mine workings of many companies already operating are being rapidly increased. The time of activity in the mines has been heretofore almost entirely in the fall and winter months, and if the coal could be stored under cover during the summer, to prevent excessive drying, there would be no danger of a coal famine in our province. Up to February 28, 1911, there were 30 mines in operation, employing about 500 persons. The method of mining is chiefly that of the room and pillar, ventilation being in many cases secured by means of chimneys to the level of the prairie. There were but two fatal accidents during the year, and the provincial government inspections tend to better equipment in every way, and also ensure greater safety to the employees. The industry is well looked after by the government, and there can be no doubt that when the projected railway from Weyburn to Lethbridge is constructed, many new mines will be opened and operated.

## SPORTS AND PASTIMES

ANY consideration of the life of the people of the province would not be complete without mention of their Sports and Pastimes. The love of sport is an inherent characteristic of the Anglo-Saxon race, and opportunities for its indulgence are unrivalled in Saskatchewan.

The long, balmy evenings of summer afford from three to four hours of daylight, after business, which are fully taken advantage of by the followers of every kind of game. Baseball, lacrosse, football and cricket all have their devotees. Groups of neighbouring towns form leagues, and great interest is taken in the inter-provincial contests. Professionalism has never reached a paying basis in any of our games, but on the contrary the amateur standing of all players is strictly insisted upon.



The Saskatchewan Minnow

It must not, however, be thought that it is in summer alone that sports are so popular. There is something in the bracing air of winter that gives vim and energy. Hockey and curling are the most popular games, and in even quite small villages one of the most conspicuous buildings is the skating rink.

Wolf hunting is a very exciting form of sport. In addition to the varied incidents of a first class coursing match, followed at a reckless pace on horseback, the wolf puts up a gallant fight for life at the conclusion of the run.

The lover of field sports must indeed be hard to please if he cannot be fully satisfied with the sport to be found in every part of Saskatchewan. In the northern parts of the province the haunts of big game are within comparatively easy reach, while elsewhere the chicken and duck shooting is unsurpassed.



## GAME AND FISH

**I**N no part of Canada are there better opportunities for sport with gun and dogs than in Saskatchewan. All over the cultivated portions of the province the prairie chicken are very plentiful, and they have increased greatly in numbers during the last few years, since the shooting season was curtailed to one month, namely October.

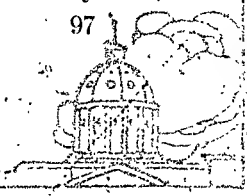
Water fowl in immense numbers breed about the prairie lakes, and the numbers of those nesting with us has greatly increased since the prohibition of spring shooting. Incredible numbers of ducks and geese are everywhere seen, furnishing the best of shooting for the sportsman.



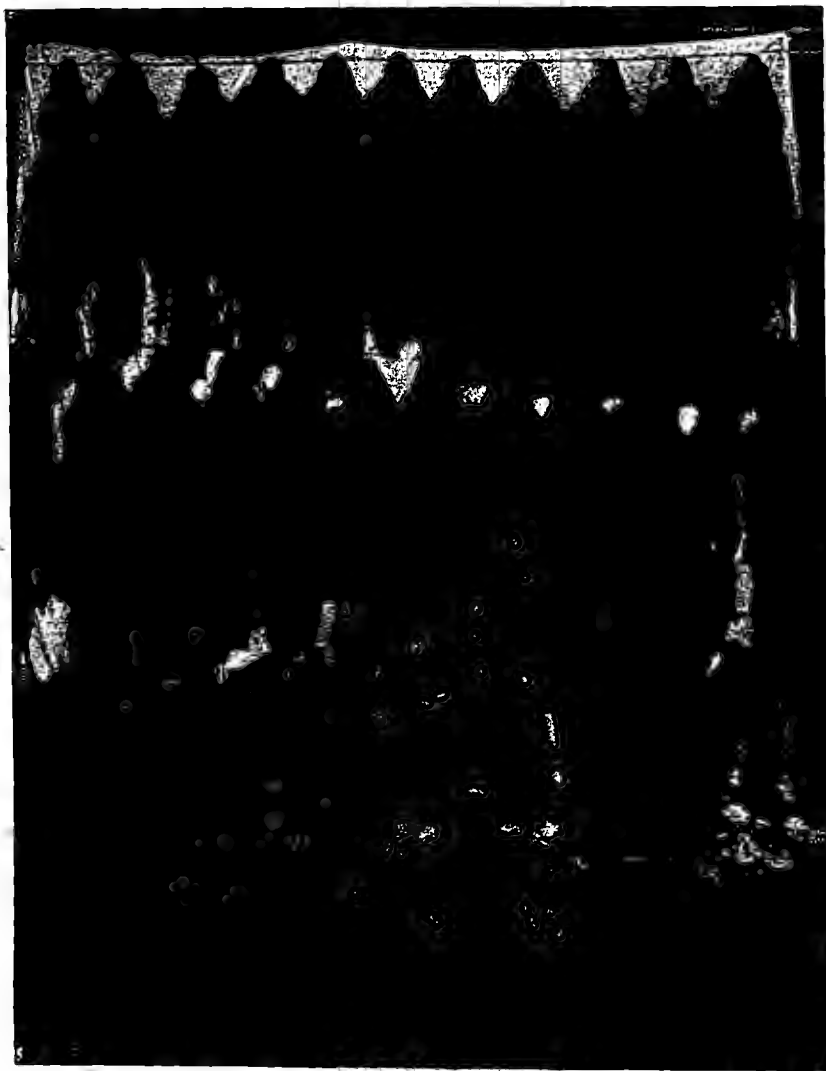
A Morning's Sport

In the south-western part of the province there are still a few antelope to be seen, but their days are numbered. They are now surrounded by settlements on every side, and will soon be a thing of the past, as they are rapidly being exterminated. In the far north and north-east of the province there are vast areas where big game of the larger species are still plentiful, and moose, wapiti, caribou, blacktail and whitetail deer are to be found.

Splendid fish are found in our lakes and rivers, and there is enough to furnish food for millions of people. But the principal supply of fish is in the regions north of the Saskatchewan river, where there are as yet no railway facilities, and there is no doubt that when these are furnished, the fishing industry will play a very important part in the commerce of the province. Huge trout up to sixty



pounds have been taken in Cold Lake, but there are perhaps more whitefish than any other kind. In the rivers goldeyes are plentiful, and occasionally very large sturgeon are caught.



The Spoil of the North

## GAME PROTECTION

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IT is natural in so large and thinly settled a country as ours is, where so many are newcomers, that there should be many breaches of the Game Laws, involuntary as well as intentional. We have now a list of 214 persons who gratuitously and effectively act as Game Guardians, and their task and that of the police is more to inform, to instruct and to warn than to prosecute. Punishment, however, is due to informed persons guilty of deliberate law breaking and 121 convictions were obtained during 1912 for hunting on Sunday, hunting out of season, hunting without license, selling prairie chicken and killing beavers. Fines to the amount of nearly \$730 were imposed, and about 11,000 licenses under the Act were issued during 1912.



## HISTORICAL SKETCH

AS a province, Saskatchewan has no marked and distinct history. The nature of the province, being mainly level agricultural land, does not lend itself to highly coloured or romantic history, but rather to a peaceful development of the resources of the country. In this respect it is in distinct contrast to many of the older and more rugged and mountainous countries. Its boundaries are not determined by the physical features of the land, nor does the position of the province permit of isolation.

At present only the south half of the province is occupied or developed. The northern part is of a more distinct rock formation and as yet hides its possibilities, but a comparison with similar structures in other countries gives the promise of rich developments in channels yet unfamiliar to the province.

Saskatchewan is the central one of Canada's three prairie provinces, as large as France and twice the size of the British Isles. Its general boundaries are, on the east, the 102nd degree of longitude and Manitoba, on the south the 49th parallel and the United States, on the west the 4th meridian and Alberta, and on the north the 60th parallel of latitude. The area approximates 253,000 square miles.

## DISCOVERY OF SASKATCHEWAN

THE discovery of this country by the white men may be attributed to La Verendrye and his sons who established Fort Rouge, giving it that name in 1731. These gentlemen received permission from the French government in France and at Quebec to explore and trade in the far west. From Fort Rouge two distinct trips were made westward, one by means of the Assiniboine and the Saskatchewan rivers on the north, and the other by the Souris and Missouri to the Rockies on the south. La Verendrye died in 1749 very much out of favour with the authorities at Quebec, who expected much more material return than was given them. Following the Treaty of Paris, explorations for trade purposes made considerable progress. In 1765-67 a number of English traders came from Quebec to Saskatchewan, but it was not until 1779 that the North-West Company, which really laid the foundation of trade in the province, was formed. The company founded forts at Le Pas, La Corne, Carlton, Qu'Appelle and Pelly.

In 1788 the X-Y Company, really a branch of dissatisfied North-West Company promoters, also started trading. In 1806 the trade of the private merchants of Montreal practically ceased. The policy of the Hudson's Bay Company was to establish posts along the Hudson Bay and then have the Indians bring their furs to these posts. The policy of the North-West Company was quite distinct. They, as a rule, formed their posts inland and usually along the route travelled by the Indians taking their furs to the bay. It was not until 1769 that the Hudson's Bay Company adopted the policy of exploring the land, and then Hearne was sent westward to make the explorations and report. It was natural that two large and strong companies would frequently clash. Struggles between them were many and frequently not reputable. The general strife culminated in 1816, when Hudson's Bay Governor Semple was killed at Seven Oaks.

The general loss due to this rivalry brought about an amalgamation of the two companies in 1821, and since that time until 1867 the Hudson's Bay Company practically governed and controlled the prairies.

## HISTORY OF TERRITORY

**S**ASKATCHEWAN'S provincial history covers only the period since 1905, but as it formed a large part of the North-West Territories it is necessary to briefly sketch some of the more important events preceding the division of territory.

The North-West territory was at first the vague designation of all that portion of British North America which lay to the North-West of the provinces of the St. Lawrence basin, a vast area comprising 3,033,796 square miles, that up to forty-two years ago was the domain of the Hudson's Bay Company. The company exists under a charter granted in 1670 by Charles II to Prince Rupert and seventeen other noblemen and gentlemen, incorporating them as the "Governor and Company of Adventurers of England trading into Hudson's Bay." The charter secured to the company not only the sole right to trade, but complete lordship and entire legislative, judicial and executive power, within the vague limits already indicated and then known as "Rupert's Land and the North-West Territories."

The British North America Act of 1867 created the present Dominion of Canada. It contains a provision for the eventual admission into the Dominion of Rupert's Land and the North-West territory. In 1869 these territories were acquired by the Canadian Government. The terms and conditions of the surrender were that the Canadian Government should pay to the Company for its rights the sum of 300,000 pounds sterling. The company was also permitted to retain its trading posts or stations then in actual occupation, with the blocks of land adjoining, and also one-twentieth of all the lands in the fertile belt. The fertile belt comprises the land bounded on the south by the United States boundary, on the west by the Rocky Mountains, on the north by the northern branch of the Saskatchewan river, and on the east by Lake Winnipeg, the Lake of the Woods, and the waters connecting therewith. The claims of the Indians of the territories were to be disposed of by the Government of Canada in conjunction with the Government of Great Britain. The French half-breed population of the Red river were dissatisfied and discontented at the manner in which, without consulting them respecting the rights which they claimed were theirs as sons of the soil, the territory had been handed over to the Canadian Government. Mr. McDougall, who had been appointed Lieutenant Governor of the Domain obtained from the Hudson's Bay Company in 1869, was met at the frontier and compelled by the discontented half-breeds to leave the Hudson's Bay post in which he had taken up his quarters and to retire to United States territory. This was the beginning of what is known as the Red river rebellion, conducted under the leadership of Louis Riel. Mr. McDougall was obliged to abandon the attempt to take possession of the country and he returned to Ottawa. The Canadian Government opened direct communication with the disaffected persons. The result was that the Red river settlements were erected into the province of Manitoba. The remaining portion of the newly acquired country was erected into separate territory of which the Lieutenant Governor of Manitoba was ex officio lieutenant governor. An executive council was appointed to assist and advise him in passing ordinances for the government of the territory. The first meeting of this body was held in 1873 at Fort Garry, amongst those attending are to be found the names of Schultz, Donald A. Smith (now Lord Strathcona) and Dubuc. The most vital questions to be dealt with then were the liquor traffic, the police and the buffalo.





The first North-West council was appointed with Mr. William Laird as governor and the late Lieutenant Governor Forget as secretary, and the appointed members being the judges of the district. This council met first in 1877 at Livingstone near Swan River until the location of the capital should be decided. In 1877 Battleford was chosen as the capital and the governor and council moved there. The first meeting at Battleford was held in 1878. In 1881, the Act was changed. A Governor was appointed, also a council of five, four of whom were appointed and one elected. In 1882 the capital was changed to Regina, or, as the Indians called it, Okanase on the Pile of Bones creek. In 1883 the council was increased to five appointed and six elected members and was responsible only to the Minister of the Interior. In 1887 the territories were for the first time represented in the Dominion Parliament, three members representing the present Saskatchewan. In 1887 the last North-West council, consisting of twenty members, fourteen elected and six appointed, was held in Regina. In 1888 the North-West Territories Act was passed, giving a Legislative Assembly of twenty-two elected members and three (advisory judges) appointed. In 1891, under Governor Royal, there was a struggle for the right to control the expenditure. A deadlock occurred in the Assembly, the result of which was that the people gained control of the public funds and Mr. F. W. G. Haultain was chosen as the first premier of a nonpartisan Assembly. In 1897, additional powers were given the Assembly in that a cabinet was formed and the Assembly had practically provincial powers. In 1905 the province was granted autonomy and Hon. Walter Scott was elected first premier of the province.

## INDIANS

THE earliest inhabitants were the Indians. The achievements of these tribes, with the legends of the races, still offer a fertile field for investigation. There were four main divisions of the Indians: the Salteaux who roamed the northern parts of the province as far south as the bluffy country extended, or roughly to Battleford; the Blackfeet, who occupied the country west and south of the Battle river; the Sioux, the southern part of the province and the northern part of the Dakotas; and the Crees in the Saskatchewan valley. The settlement of these tribes on reserves formed a difficult and delicate task on the part of the Government.



At the time settlers began to move westward from the Red river the buffalo, upon which the Indians virtually depended for existence, were rapidly becoming extinct. One of two things had to be done; either feed the Indians or fight them. The Government decided on the more humane course and fed them. After lengthy negotiations the Indians consented to go on reserves, the areas of which were fixed at the rate of one square mile for every family of five. In addition to this the Government agreed to pay perpetual annuities of \$5 per caput to each Indian, man, woman and child; the payment of an annual salary of \$25 to each chief and \$15 to the headman. Agricultural implements, oxen for ploughing, cattle to form the nuclei of herds, seed grain, twine for fishing nets and some minor articles were also stipulated for. Afterwards it became the settled policy of the Government to appoint instructors to each reserve in proportion to the number of Indians thereon, who teach their charges farming, carpentering, blacksmith work, and assist them. These instructors have proved themselves to be, and are so recognised by the Indians themselves, their best friends, protectors and advisers. The treaties provide for the establishment of schools for the education and industrial training of Indian children. At the urgent demand of the Indians themselves that no intoxicating drinks should ever be sold to them, a stringent Prohibition Act was passed, and although it has failed amongst the white people and has had to be supplanted by a Licensing Act, yet the regulations as regards the non-supplying of liquor to Indians are still in force.

The result is that the Indians cannot obtain either fire water or beer. Free land grants were also made to the half-breeds.

The prevalent notion that the Indian is disappearing is not sustained by statistics, and in most parts of Canada and particularly in Saskatchewan it is found that the Indian population is stable or on the increase.

In spite of some severe winters, little real suffering is reported among the Indian tribes in any part of the country. This indicates that their old habits of improvidence are gradually giving place to thrift and industry, which helps them to provide against the hardships of the average winter.

Though tuberculosis still continues to be a dread scourge among the Indians, a decreasing fear of the hospital treatment, and an

increasing amount of knowledge among them of the disease, has done much towards checking its spread.

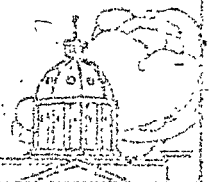
The Indians are rapidly learning that comfortable and sanitary surroundings mean greater enjoyment of life, and their dwellings are fast becoming better from both standpoints.

The efforts of the government in the development of agriculture among the Indians are meeting with gratifying success. In 1905 the Saskatchewan Indians produced 193,071 bushels of grain and roots, while in 1911 the total was 299,851 bushels. A remarkable increase in acreage is also shown. Six years ago the acreage was 8,355, while in 1911 the acreage was 14,562.

Education is spreading rapidly among the Indians, and many schools are being established.

## EARLY SETTLERS

THE early settlers consisted of voyageurs, coureurs de bois, traders, officers of militia companies which came to Fort Garry in 1846, and hunters. Their whole life was hunting, and, as far as Saskatchewan is concerned, hunting the buffalo. Over the prairies there may be said to have been two distinct districts frequented by the buffalo, the Foot hills and the eastern prairies. In each case the buffalo annually roamed north, and, avoiding their own trail, circled back. To meet the buffalo on these routes the hunters left at stated times of the year. It is recorded that the expenses of a hunting outfit leaving the Red river in 1840 was \$120,000 and included 1,630 men, women and children, and 1,210 carts. In 1856 the total population including all the Indians of the prairies was 48,000. There were various forms of stimulus to settlement in Saskatchewan. The rebellion of 1869-70 brought quite a number of dissatisfied settlers west to Saskatchewan. The Winnipeg boom of 1882 and its collapse forced quite a number westward. The surveys of railroads and subdivisions of the country left a few here and there. The descendants of the Selkirk settlers were being gradually crowded out of Manitoba, the early Mennonite and Icelandic settlements of Manitoba began to move westward, the construction of the Canadian Pacific railway and its immigration policy, which as a government institution had proved a failure, under its reorganisation by Lord

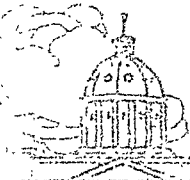


Mount Stephen was successful. Besides these causes and the American civil war there was a general westward American movement, the spirit of which made itself felt in Canada.

At the time of Confederation one of the conditions was that there should be a transcontinental railroad. The first survey for this road was *via* Battleford and Edmonton and along this line of survey many of the oldest settlements are to be found. The second line of survey and the one which was adopted was *via* Regina and Calgary. Towards the east of building this road a large area of the land was granted to the railroad company and the tax exemption terms of this grant have given rise to considerable friction and litigation, and the western provinces are now urging action on the part of the federal government. One of the earliest ideas of promoting immigration was that of establishing large farms such as the Brassey, Sunbeam, Bell, and Colonisation Company and Sir Leicester Kaye farming enterprises. But these being operated at long range and by men unacquainted with the nature and conditions of the country were largely failures.

There were many dangers to settlements in the early days. Indian restlessness was caused by the surveys, particularly the railway surveys of the United States, which drove the buffalo north and made the Indian fear the loss of his hunting ground. Naturally, the tribes resented any such encroachment on their rights. Another danger was that of the whiskey trade which was operated mainly from Fort Benton. It was a distinct organisation and the traders resorted to every extreme means to maintain their business, which had a disastrous effect on the Indians and incidentally upon their attitude to the white settlers.

To find the best method of maintaining law and order in the North-West Territories formed a problem of some difficulty to the Canadian Government. Military officers were sent to investigate conditions. In 1871 Lieutenant Butler, afterwards Sir Wm. Butler, reported that law and order was unknown in the Saskatchewan country. The following year Colonel Robertson Ross, then Adjutant General, and commanding the Canadian Militia, after personal investigation, recommended the formation of a regiment of mounted rifles. Out of the recommendations and reports submitted to the Canadian Government a military body with civil powers was finally evolved. As a result of the destructive influence of the whiskey trade the Indian population was rapidly decreasing and there was little security



for either life or property. The cold blooded massacre of Indians in the Cypress Mountains in June, 1873, hurried the organisation of the mounted police, and the same year a detachment in charge of Colonel French, who was appointed first police commissioner, was dispatched over the Dawson route. Later the force was increased to 300, and these men accomplished their long march from Fort Dufferin into the Far West in 1874. Colonel MacLeod, with some 50 men, was left at the Old Man's river, where he built Fort MacLeod. Others were scattered in different parts of the territories. Colonel MacLeod was able to report, within one month of his arrival on the scene of bloodshed, where 150 murders had taken place in eighteen months prior to the arrival of the police, that the country around MacLeod, and the whole of the south-western part of the Saskatchewan country was as peaceable and quiet as any part of Canada. It is the proud boast of this force that the country has remained peaceable and quiet. In 1881 the Duke of Argyll, as Governor General of Canada, travelled over this whole western country and saw practically all the police. Speaking of this force and of what they had accomplished at that time he said:

"The Dominion, through her Mounted Constabulary, is showing herself the inheritor of their traditions. She has been fortunate in organising the Mounted Police Force, a corps of whose services it would be impossible to speak too highly. A mere handful in that vast wilderness, they have at all times been ready to go anywhere and do anything. They have often had to act on occasions demanding the combined individual pluck and prudence rarely to be found amongst any soldiery, and there has not been a single occasion on which any member of the force has lost his temper under trying circumstances or has not fulfilled his mission as a guardian of the peace. Severe journeys in the winter and difficult arrests have had to be made in the centre of savage tribes, and not once has the moral prestige which was in reality their only weapon been found insufficient to cope with difficulties which in America have baffled the efforts of whole columns of armed men. I am glad of the opportunity to name these men as well worthy of Canada's regard and as sons who well have maintained her name and fame."

The present Commissioner of the Royal North-West Mounted Police is Lieutenant Colonel A. B. Perry, C.M.G., who has capably filled this important position for the past ten years.

Some mention should also here be made of the devoted efforts of the missionaries of every denomination. These men have always



taken a foremost place in every movement looking towards good government, and have given liberally of their time and thought to everything tending towards the amelioration of the condition of the people. Amongst the first to settle in the country, their wide experience has always been placed unreservedly at the disposal of those endeavouring to solve the various problems incidental to the settle-



Royal North-West Mounted Police Barracks, Regina

ment of new territory. That their services in this regard have been invaluable is conceded by all, no matter how varied their opinions may be on either religious or political matters.

The means of transportation were rather primitive, being by canoes and York boats where possible, otherwise by pöny, ox cart, dog and snow shoes. A little later, as the settlement along the

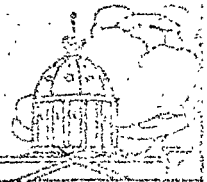
North Saskatchewan developed, a steamer was run from Winnipeg to Edmonton. Postal and telegraphic communication started in 1876, the first telegraph line following the first railway survey.

As in the case of the more recent transcontinental lines, the prairie section of the Canadian Pacific railway was completed before the eastern. As the railway stretched across the prairies, settlement followed in its wake as far as the then known arable division extended.



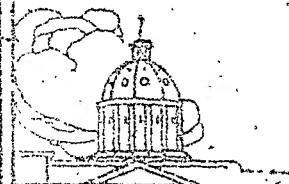
#### Railway Construction

At that time it was considered impossible to grow grain profitably further west than about thirty miles beyond Moose Jaw on this line of railway. With the exception of a few scattered settlements of ranchers at Swift Current, Maple Creek, Medicine Hat, Calgary and Edmonton, the latter three points in Alberta, these vast plains



west from Moose Jaw to the Rocky Mountains were unoccupied except by the Indians, buffalo and antelope. It was not until November of 1886 that the first scheduled transcontinental passenger train passed through from Montreal to what was known then as Port Moody, the Pacific coast terminus. All the country extending back for hundreds of miles from the railway line, in which there was any settlement, had to be reached by cart trails. Until the railway went into Prince Albert in 1891, supplies had to be carried by ox or pony carts from Winnipeg, a distance of three hundred miles. Many are the stories told of the hardships borne on these long, lonely journeys, not only by men, but by women who, with their husbands, courageously faced the trials of pioneer life. The only vehicle then in use was the Red river cart, a product of the old Selkirk settler. It was made of wood throughout. One of the sights of the prairie was the passage of a train of fifty or more of these carts wending their way across the plains. Their noisy creaking must have oftentimes sounded weird but welcome music to many a lonely settler to whom they formed the only link with the outside world. Qu'Appelle, on the Canadian Pacific railway, was the nearest railroad point for the long journey to Prince Albert in the north, and, until the Qu'Appelle and Long Lake railway was constructed in 1891, all this northern country was dependent upon the Red river cart for supplies.

Many of the settlers had outfitted in Winnipeg, and came up by trail chiefly with ox teams, although a few brought horses. It is almost impossible, as one passes through the prairies comfortably seated in a Pullman car, to imagine the hard, bitter experiences of those early settlers. They encountered, on the way westward, obstacles that must have disheartened the bravest. Every depression and slough was filled with water and considerable ingenuity was required to either navigate or circumvent them. To get across creeks oxen had to be unhitched and the body of the carts removed from the wheels and floated over. To establish a home and cultivate a farm was a far more difficult proposition than it is today. The first consideration was a house. The erection of a log shack was an easy matter when in close proximity to timber, but if there were no timber in the vicinity the settler had to be content with a house built of sods. From the time the first settlers began to arrive until 1897 everything seemed to militate against their advancement. It seemed as if a hoodoo or evil spirit possessed the country. Those who came into Saskatchewan in the early days had to learn to farm





from their own hard experience. Even those who came west from Manitoba had perforce to find out that the methods adaptable to the soil of the Red river valley did not conform to the climatic and soil conditions of Saskatchewan.

There were no organised markets. For many years the only product of their labours that could be converted into cash was wheat. The farmer who had fat steers to dispose of had to depend upon the local butcher who bought them at his own price and just when it pleased his convenience. There was no exportation of butter, and, except in the case of wheat, the barter system prevailed. Farmers' wives might sell to private customers in the village, but butter, eggs and all kinds of produce were handled by the local storekeepers on the barter principle; tea, sugar, dry goods and other necessities being given in return for the farm products. Freight rates were excessively high. Settlement was thin and scattered and the amount of traffic relatively small in proportion to the enormous distances traversed, and the seasons so disappointing that the burden seemed likely to be more than the country could stand.

At that time it is said that farmers had to pay half the value of their wheat crops in freight charges, or, as they put it, "It took one bushel of wheat to take another out." Today freight rates are regulated by a Commission. The farmer finds a ready market for everything he produces and everything can be quickly converted into cash. In the early days there were no internal elevators co-operatively owned and operated by the government and the grain growers, no terminal elevators under the supervision of Federal officials, no grading inspectors to see that the farmers were not defrauded, no shippers to handle their stock and no markets in which they could obtain the regular prices. While the farmers are still agitating for further improvements the advancement made along these lines is as remarkable as the rapid progress of the country itself. Other reasons may be given to account for the unsatisfactory conditions prevailing in the days of early settlement. The North-West Territories of which Saskatchewan formed a large part were organised and opened at a time of agricultural depression when farm produce was cheap the world over. Even with a fairly good yield the price of grain was so low and it cost so much to transport it to the London and Liverpool markets that the profits realised by the farmers were very small. The highest quality of wheat has at times realised in the west as little as 40c per bushel. Today farmers are receiving more



than this for feed which in the early days would not have been saleable. There was no remunerative price for the by-products of the grain. Millers burned bran for fuel because it was cheaper than wood or coal. Today bran brings \$24 per ton. Even as late as 1900, which was a dry year followed by a wet fall and bad threshing season, feed wheat only brought 10c per bushel.

Most of the early settlers did not possess much money. Their residences were for the most part log and sod shacks. A man achieved distinction if, in the first few years, he owned a buckboard, a kind of buggy without springs, or a "jumper," a heavy sledge as unlike the present day gorgeous cutter as an Irish jaunting car is to a rubber-tired taxi-cab. Poplar was the staple timber. Everything was made of poplar; even the bedsteads were composed of poles of this serviceable timber.

When the Canadian Pacific was first projected through the Saskatchewan valley or the fertile belt, the present route of the Canadian Northern railway, it was felt that that part of the country would advance rapidly and settlers trekked into it in large numbers. Unfortunately for these settlers the survey of the line was shifted a hundred miles south of the original route so that this entire north country was without railway communication until the advent of the Canadian Northern. The settlers courageously stuck to the country, although the majority had to haul their wheat over sixty miles to the nearest station on one of the lines of railway running north-west. When the expenses of this long haul had been accounted for the balance of the proceeds of the load of wheat was discouragingly small. Wheat was not graded as it is today, and the farmers had to be content to accept what the buyer decided to pay. For years immigration was very small and there was little or no money in the country. Every dollar had to do the work of three. Besides, there was no recognised system of farming such as prevails today, and there was no institution such as an agricultural college through whom they could obtain assistance and advice on all matters relating to farm work.

## COLONIES IN SASKATCHEWAN

**C**HIEF amongst the early colonies established in Saskatchewan may be mentioned the Montreal colony of Englishmen which settled north of Whitewood; the Hungarians, who were early settlers in this part of the province, celebrated last year the 25th anniversary of their arrival in the country; the Crescent Lake colony, promoted by J. T. Moore, an alderman of Toronto, now M.L.A. for Red Deer; Yorkton colony, composed of settlers from York County, Ontario; Jewish colonies south of Wapella and on the north edge of Moose Mountain, and the Hirsch colony, founded by Baron Hirsch; Finnish colony, established on the south side of the Qu'Appelle in 1886; German settlements in the Pheasant Hills, north of Grenfell; Crofters from Scotland settled in the Wapella district and in the country between Burrows and Pipestone creek; those brought by Lady Cathcart to the Moosomin district, and the Barr colony at Lloydminster in 1900.

